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THE MIGRATION PERIOD CEMETERY FROM ERNEI

Alpár Dobos – Sándor Berecki
(eds.)

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FOREWORD

Preventive archaeological research of the last three decades has delivered both quantitative and qualitative data so that segments of the ancient history of Transylvania are becoming less obscure. More precisely, in the case of this important contribution, it is about a shorter chronological interval, a well-defined timespan within the more relative Migration Period, i.e. the third quarter of the 5th century AD, with possible slight extensions in both directions. The cemetery at Ernei–*Köles-kert* (the site comprises also settlements from various periods) is located in the central–north-eastern part of the Transylvanian Basin, in the Mureş Valley. The importance of the corridor created by this river should be noted from the outset, as it facilitated connections with the Tisza Plain, aiding the demographic movements in both directions.

The findings and results of the preventive archaeological research of 2015 are being published now, not too long after the excavations, still within a reasonable timeframe. This success can be explained by the merits of a young team, already noted for their much-appreciated scientific contributions. The various analyses, like those of the different artefact categories, are well founded and supported by up-to-date references, while the results are presented in concise and convincing terms. Unfortunately, the poor state of conservation of most of the skeletons has limited the possibility of comprehensive interpretations.

As small groups of graves or even solitary burials are the main funerary features of the period, the possibility that this cemetery was fully excavated, with a total of 70 graves and perhaps a few other peripheral burials in the uninvestigated portions, makes the site all the more special. With a relatively large number of graves, most of them unfortunately robbed, the cemetery at Ernei belongs to a smaller group of similar burial sites in the Carpathian Basin, as it has been highlighted in this volume as well. The graves were arranged along roughly parallel and relatively orderly rows in a north-south direction, with notable gaps between some groupings. In addition to their social significance, these hiatuses may also suggest the sudden interruption of burials in the originally planned space. Such an organisation indicates a tendency to structure a genuine 'row-grave cemetery' (*Reihengräberfeld*), similar to those characteristic of the later period, present also in the Mureş area, during the time when the specific 'Gepidic world' of the Tisza Plain and Transylvania becomes established.

One of the main merits of the volume is that it brought into discussion the possibility of the local genesis of the Transylvanian *Reihengräber* horizon, an issue completely omitted before or only vaguely addressed from the perspective of a phenomenon that could integrate distinct cultural backgrounds and ethno-demographic groups. This hypothesis can be supported by the already known data from the very micro-zone of the cemetery of Ernei, which suggests a certain continuity of settlement from the end of the 4th century and throughout the 5th century (despite the severe demographic decline affecting much larger areas), or, as expressed in the volume, a local process of transition to the setting specific for the first two-thirds of the 6th century. Most important in this respect are the two graves at Sângeorgiu de Mureș–*Kerekdomb*, situated at a short distance from the cemetery at Ernei. Also dated to the second half of the 5th century, the

inventory of these graves and especially the elements of the burial practice link them closely to the traditions of the preceding Hun period.

However, even with this newly available information, the contents of the transformations that took place at that time remain partly unclear, and not only in the case of Transylvania, where certain regional variables must also be taken into account. The genesis of the setting characteristic of the Gepidic power structure (as an eastern periphery of the western 'Merovingian world'), with the habitation concentrated in the Tisza–Mureş–Criş interfluve and in Transylvania (sometimes referred to as 'Little Gepidia'), can be more correctly understood as an integrative phenomenon of distinct traditions and effects of interactions between various cultural backgrounds. The contacts with the Middle Danube area are indicated exactly by some of the artefacts discovered in the Ernei cemetery. The structures of the Gepidic Kingdom started to consolidate in the later part of the 5th century and towards the beginning of the following one, presumably as a result of earlier demographic movements and changes that occurred during the Hun era and continued in the following period. In any case, the 'Gepidic period' (late 5th century and the first two-thirds of the 6th century) marked significant population growth in the Tisza Plain (east of the river) and Transylvania.

The possibilities of archaeology are often limited, especially when the complicated issue of identifying ethnic structures in the past is debated. The early history of the Gepids remains less known, but the Upper Tisza region, especially for the 4th century, has often been regarded as the temporary residence of this Germanic people with origins in northern Europe. In terms of a changing material culture, the movements of this population are difficult to trace in the Hun period and immediately afterwards. The attention of specialists has always been drawn to the famous princely tombs from Apahida and the hoard from Someșeni dating from around AD 500. Both sites are situated in the north-western part of the Transylvanian Basin, in the vicinity of the present-day city of Cluj-Napoca. They undoubtedly point to an initial power centre, often attributed to the Gepids, although other opinions have also been expressed. The number of known funerary finds that can be dated to the second half or the last third of the 5th century and particularly to the first two-thirds of the 6th century, when the valley of the Someșul Mic River became an important residential area, has considerably increased lately in this micro-region. Such cemeteries were previously unknown north of this valley, thus the recent identification of the two row-grave cemeteries at Șardu and Topa Mică, at a considerable distance to the north, has been most surprising. Segments of these burial places were located on the path of a future motorway and were investigated exactly by one of the authors and editors of this volume (Alpár Dobos; these sites are only mentioned in the volume). Their location is also significant along the ancient Roman road between *Napoca* and *Porolissum*, i.e. exactly on the main route that has always linked the Transylvanian Basin to the south-eastern periphery of the Upper Tisza region, the latter covering the north-western extremity of Romania and the north-eastern extremity of Hungary. While waiting for the publication of these and further explanations, a discussion can already be initiated about the possibility that the two cemeteries indicate the movement of an important population from north to south, which eventually colonised the Someșul Mic Basin. As a result, and as the volume also emphasizes, situations specific to more restricted geographical areas are not to be neglected, especially in the period when the Transylvanian horizon of 'row-grave cemeteries' was being formed.

The chapter on the very interesting phenomenon of grave reopening, specific for the discussed period (and others as well), with the looting of the grave goods being its main purpose, cannot go unnoticed. The scientific approach, with examples offered by the Ernei cemetery (the quality of the field research and documentation should also be noted), along with the thorough

study of a bibliography that is not easy to fully cover, gives this study the merit of being the first serious effort of this kind undertaken by specialists in Romania for the 5th–7th centuries.

In possible agreement with the authors of the volume, referring to the much-used phrase 'Migration Period', often accompanied by less clear, questionable explanations, it would perhaps be preferable to consider the 'horizon of row-grave cemeteries' in the Tisza Plain and Transylvania as a manifestation in the form of a local 'late antiquity'. This means a homogeneous cultural environment, even though it formed under a relatively short period and from various sources, for which the contacts with the late Roman world south of the Danube remained important, the relations between the Gepidic rulers and Constantinople being confirmed also by literary sources.

Although we still need confirmative data that only archaeology can provide, the conclusion of the volume must be taken into consideration: the central area of the Mureș Valley played an important role in the process of forming the setting specific for the Gepidic Kingdom, of which Transylvania was a part until the appearance of the Avars in the Carpathian Basin.

This remarkable contribution, briefly summed up in these introductory lines, offers an optimistic perspective, proclaiming a rapid and consistent progress of the investigations aimed at a period, which, in the case of Transylvania at least, remains insufficiently known and which seems to have been less dark and turbulent than previously supposed. As final words, full congratulations are due to the authors and editors alike.

Ioan Stanciu
Institute of Archaeology and Art History
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I. INTRODUCTION

Sándor Berecki

The infrastructure investments of increasing number have contributed significantly in the last decade and a half to the enrichment of Mureş County's archaeological map. In some of the cases, such as the Neolithic settlement excavated in the courtyard of the University of Târgu Mureş (Berecki – Hágó 2020), the multi-layered settlement in the schoolyard of Voivodeni (Németh 2015), the Roman oven in Cristeşti (Man et al. 2010) or the Bronze Age settlement and cemetery in Luduș (Berecki 2016), the results have been scientifically processed and published, while the interpretation of several other prehistoric, Roman or medieval excavations is in progress.

The archaeological site of Ernei–*Köles-kert* (RAN code 116661.02) was investigated in the summer of 2015, within the framework of the archaeological rescue excavations at Site no. 7 of the "Alternative Eastern Bypass Road of Târgu Mureş Municipality", at km 10+550 – 11+100. The members of the team who took part in the excavations at this site were archaeologists Sándor Berecki, Alpár Dobos, Márton Ferenczi, Mihály Huba Hőgyes, Norbert Kapcsos, Zsolt Körösfői, Nándor Laczkó, Keve László, Alpár Lokodi, Rita E. Németh, Botond Rezi, Bálint Szász and Sándor-József Sztáncsuj. The documentation of the research as well as the archaeological material can be found at the Mureş County Museum.

Ernei (Hungarian: Nagyernye; German: Rohrdachen) is part of the Transylvanian Plateau. Its current relief, like the entire relief of the Mureş Corridor, is the result of the river's deepening in the Sarmatian and Pannonian sedimentary formations before the Quaternary, and also of the rich and long-term influence of the shaping factors, particularly fluvial erosion, torrentiality, gravitational processes and flooding. The landforms in the settlement of Ernei, situated on the left bank of the Mureş River, include the river's terraces with meadow areas and former marshes, currently dried up, but represented by specific vegetation. At a distance of a few kilometres from the river meadow, there are a small number of hills with an insignificant deviation in altitude. The archaeological site of Ernei–*Köles-kert* is situated on one of these low-lying hills. The micro-area has both groundwater and surface water, the most significant of the latter is the Mureş River, which collects water from several tributaries on the township's territory. The Terebici/Terebics stream borders the archaeological site from the east (Fig. 1).

Due to the meadowy character, the water table is at the surface in the Mureş River's area. At the ground surface, under the topsoil, there are fine-grained, clayey-pebbly rocks, under which lies a coarse alluvial deposit, represented by gravel and sand. The underlying layer is a compact, grey marl clay, hundreds of metres thick. Above the impermeable marly clay there is a groundwater table, the source of which is meteoric water infiltrated into the ground. This impermeability created some difficulties for archaeological research after the heavy rains of summer 2015 (Fig. 2).

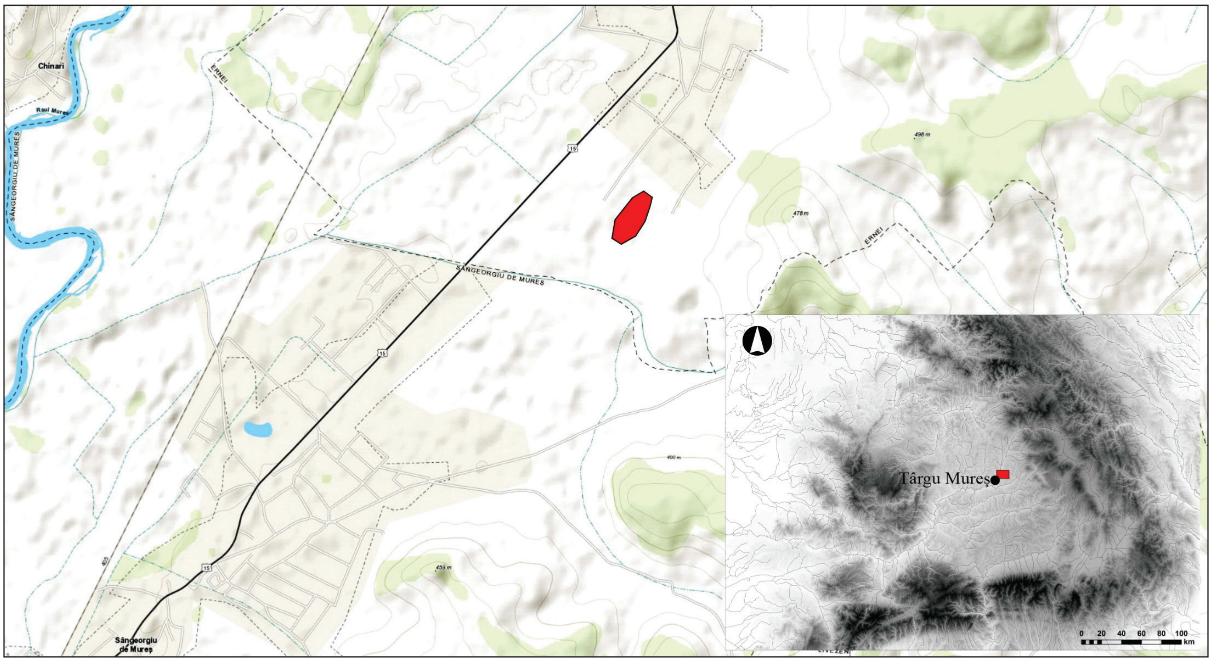

Fig. 1. Location of the site.

The archaeological site is located on the left bank of the Mureş, on its first terrace, and the right bank of the Terebici stream, a tributary of the Mureş. It is situated south of the border of the township of Ernei, at a distance of 6 km from the centre of the town of Târgu Mureş. The terrace has an altitude of 335–337 m, its geographical coordinates being 24°38'10" east longitude and 46°35'40" north latitude. The site has a good visibility over the Mureş valley. Since the investment project for the construction of the Târgu Mureş bypass road has not yet been completed, the site is currently used partly as pasture, partly for crop cultivation: mostly wheat, rye and corn.

Fig. 2. Aerial view of the archaeological site on the route of the unfinished bypass road, one year after the excavations (photo: Z. Czajlik, 5th July 2016).

Traces of several settlements from various chronological periods have been discovered within the Ernei–*Köles-kert* site. The earliest settlement belongs to the Neolithic Criş culture, and consisted mainly of pottery clusters and a few slightly sunken features found in the southern part of the site, on the smooth slopes on the right bank of the Terebici stream (Berecki – Sztáncsuj 2019).

The Bronze Age is represented by a Middle Bronze Age pit (Wietenberg culture) and nine graves of the Noua culture with skeletons in a crouched position. The most consistent part of the ceramic material is represented by the settlement of the Gáva culture from the Early Iron Age, totalling 31 archaeological features, concentrated on the upper and central plateau of the site, missing from the even slope towards the right bank of the Terebici stream. Stray archaeological traces can also be attributed to the Late Iron Age (one feature) and the Roman period (6 features), consisting only of a few ceramic fragments specific to these periods. These came up towards the right bank of the Terebici stream and on the southern side of the plateau.

The most numerous and significant finds come from the Migration Period. Graves were discovered in the northern part of the site, and as the plans for the building site provided for a parking lot, it was possible to survey all of the cemetery, as it lay entirely within the area designated for this purpose. In total, 70 graves were excavated (Fig. 3).

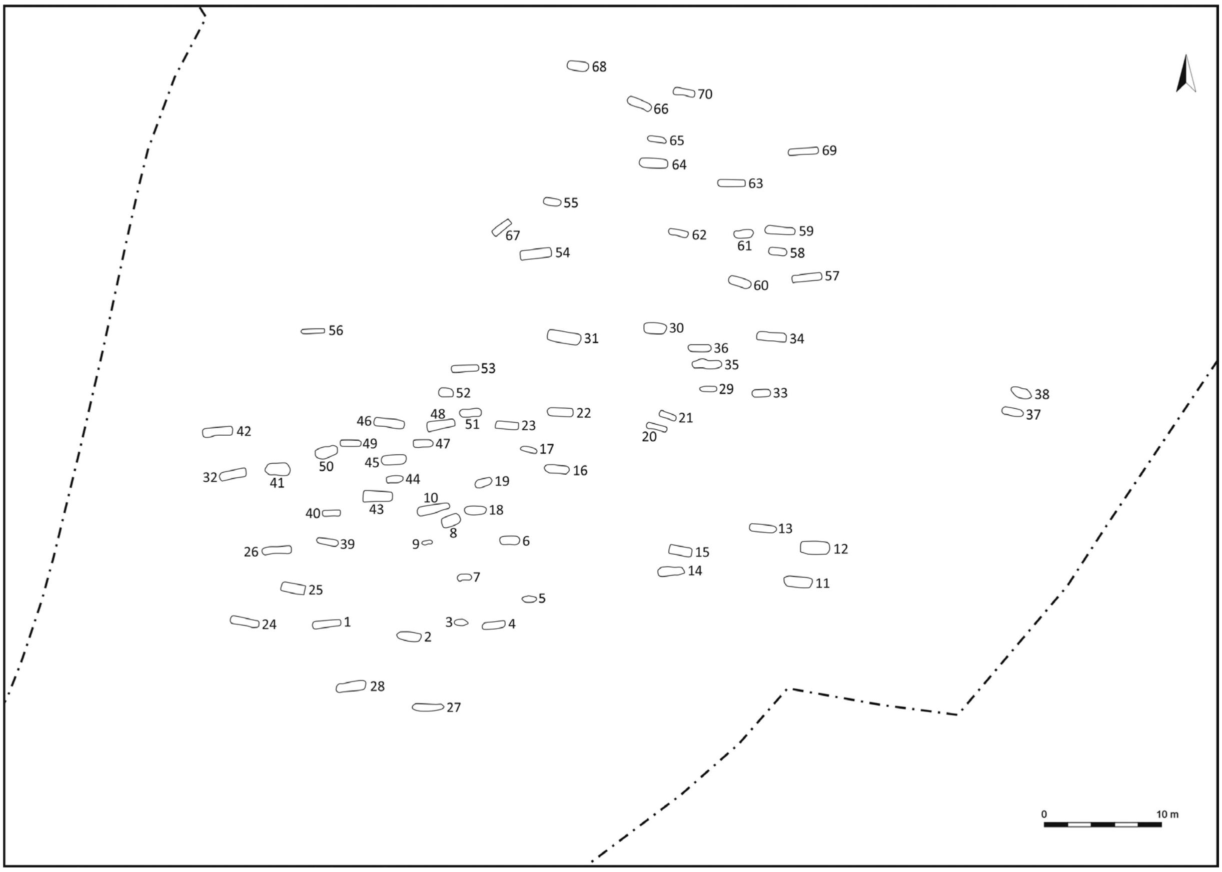

Fig. 3. Ernei–*Köles-kert*, ground plan of the cemetery.

The depth of the graves varied between 0.60 and 1.20 m. The grave pits or reopening pits were visible at the level of the clay due to the different, darker colour (Fig. 4). During the research, the graves were sectioned longitudinally, first uncovering half of the grave. After graphic and photographic documentation of the grave fill, the entire grave was investigated and the final documentation of the archaeological feature was drafted.

Fig. 4. Grave pits after topsoil removal (above); excavation of the graves (below).

The Migration Period archaeological site at Ernei–*Köles-kert* completes and even redefines the archaeological landscape of the micro-region. At the moment of our research other incidental finds or contemporary sites were known (Lazăr 1995, 126/B-C). The nearest and most important finds in terms of understanding archaeological phenomena at the Ernei–*Köles-kert* site are the 2004 discoveries at Ernei–*Carieră*, where a multi-layered settlement was identified during

rescue excavations, with consistent traces of a Bronze Age settlement (Berecki – Németh 2014) and Migration Period features. One of these, feature G27, attests to rituals involving human sacrifice in the late 4th and early 5th centuries AD (Crişan – Lăzărescu 2010).

Of particular importance for the cultural and chronological interpretation of the Migration Period cemetery of Ernei–*Köles-kert* is the grave testifying to Hunnic Age traditions excavated in Sângeorgiu de Mureș–*Kerekdomb*, which was discovered at the same time as the Ernei cemetery, in 2015, also during the research preceding the construction works of the bypass road. The man with mongoloid traits and with an artificially deformed skull, aged between 25 and 35 years, is dated to the second half of the 5th century AD on the basis of the grave goods (Dobos et al. 2021).

Finally, in the late 1980s, on the eastern border of Sângeorgiu de Mureş, in *Dealul Bunii*, V. Lazăr (1993, 148) excavated traces of early medieval settlements, in addition to prehistoric and ancient finds. He dated some of these to the 4th, most of them to the 7th, and some finds to the 8th–9th centuries AD (Lazăr 1995, 211–212).

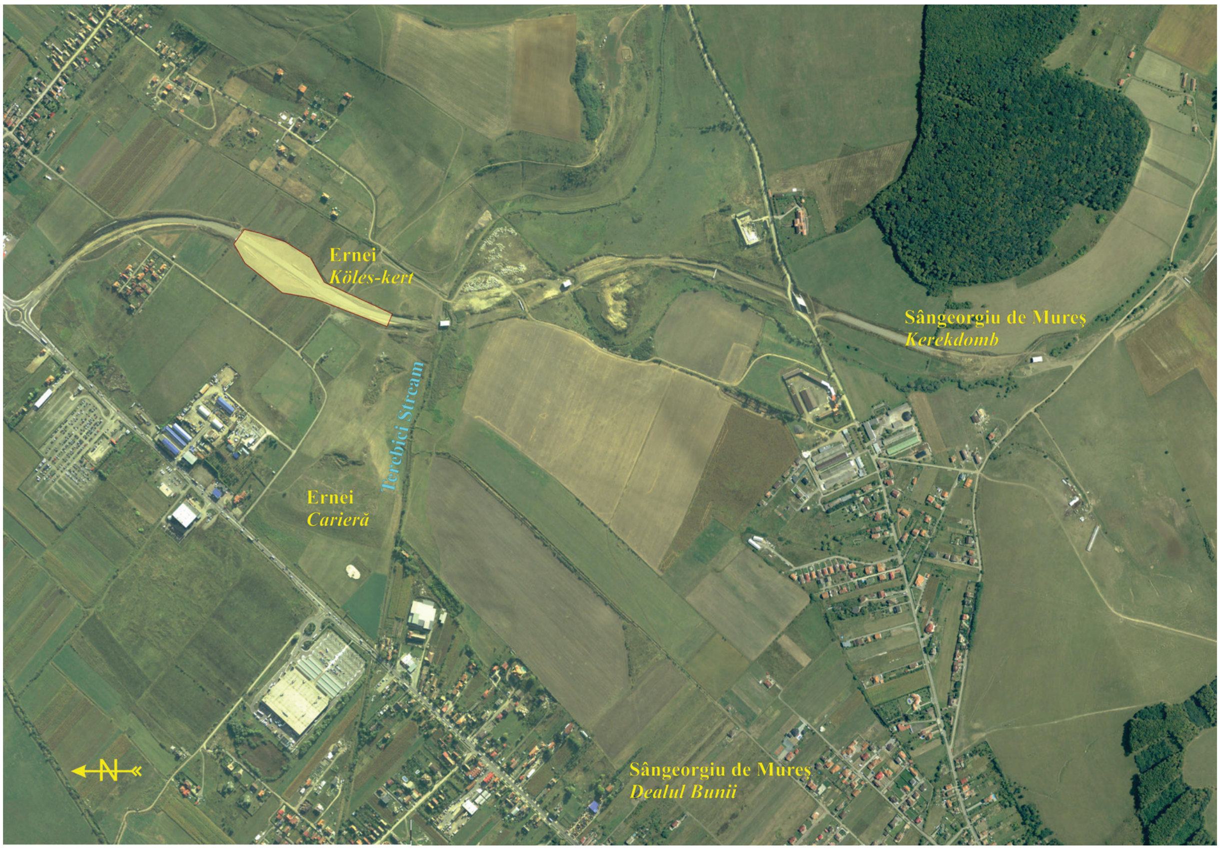

Fig. 5. Migration Period and early medieval sites on the common border of Ernei and Sângeorgiu de Mureș.

Therefore, taking into consideration the importance of the micro-region for the understanding of the Migration Period in the Mureș Valley, publishing a monograph of the cemetery of Ernei–*Köles-kert* was set as an objective by the leader of the excavation and the participating researchers as soon as the field research was completed. It is interesting to note that all seven researchers involved in writing and publishing this volume also took part in the archaeological excavations. The publication of this volume and the scientific and promotional events related to the archaeological site were supported by the National Cultural Fund's Hungarian Genius Programme 2022.

II. CATALOGUE OF THE GRAVES

Norbert Kapcsos M., Alpár Dobos, Márton Ferenczi,
Mihály Huba Hőgyes, Zsolt Körösfői

During the field work, the archaeological features were numbered in order of their identification, regardless of their age. The first grave of the Migration Period cemetery was registered with no. 81. For an easier understanding, in the present volume the burials were renumbered from 1 to 70, and their number from the excavation is given in brackets.

The age and sex of the individuals are indicated only in those cases when the anthropological analysis was able to determine them, even if sometimes these can be established, with a certain margin of error, on the grounds of the dimensions of the burial pit and the grave goods.

In the catalogue the following technical abbreviations are used:

D – depth	L – length
Dm – diameter	Th – thickness
H – height	W – width

Grave 1 (Cx. 81) – Pl. 1

O: W–E (265°); **L**: 2.4 m; **W**: 0.61 m; **D**: -0.65 m; **Age**: –; **Sex**: –.

Grave pit: Rectangular grave with rounded corners, vertical walls and flat bottom, filled with brownish-yellow compact clay. **Reopening**: The reopening extended on the western and central part of the grave. The reopening pit is elongated-oval in shape, narrowing towards the bottom, its fill is blackish-dark brown. **Coffin**: The remains of poorly preserved wood at the bottom of the grave probably indicate the presence of a coffin. **Position of the skeleton**: At the bottom of the grave, remains of poorly preserved long bones and skull fragments were found in secondary position. **Grave goods**: 1. In the southwest corner of the grave a small, three-layered, lobed backed bone *comb*. The front plate is decorated with rings-and-dots, the plain back plate and the tines are held together by bronze rivets. The semi-circular, high handle forms a straight angle with the asymmetrical, wide side plates. The tines have not been preserved. H (including the handle, without tines): 38 mm; L: 78 mm; Th: 11 mm. (Pl.1/1.2). 2. Near the comb a fragmentary iron *knife* with straight back and the handle in upper position. The 11 mm wide tang has an oxidised bump in the centre and near the blade, which may be the rivet used for securing the handle. At the time of documentation in the field, its rusted impression was 120 mm long. Dimensions of the blade based on the fragments: W: 18 mm; Th: 4 mm. (Pl. 1/1.7). 3. Iron *buckle* in the western part of the grave, in secondary position. The oval buckle ring is circular in section; the tongue with semi-circular section is made of copper alloy. $Dm_{buckle\ ring}$: 41 × 24 mm; Th: 3 mm; L_{pin}: 19 mm. (Pl. 1/1.3). 4. In the central part of the grave, remains of leather were observed, on which a circular silver *buckle* was found. The tongue is semi-circular in section, its rectangular base is decorated with three notches. Part of the

buckle ring is missing. $Dm_{buckle\ ring}$: 15 × 13 mm; Th: 4 mm; L_{pin}: 13 mm. (Pl. 1/1.5). 5. 24 *beads*, of various materials and types, found in secondary position, occurring in two main clusters: one, consisting exclusively of one bead type, at the eastern end of the grave pit, and one in the central part of the pit, consisting of several different types: a. 19 simple green seed beads, most of them at the eastern end of the grave, a smaller number in the central part. They are manufactured by drawing and segmenting, both single- (n=16) and double-segments (n=3) occur. All individual segments are round with several variations regarding their longitudinal section. Variations regarding their colour and size indicate two separate sets: 12 single- and 2 double-segment specimens have a darker, surf green colour, and a larger size (single-segments: L: 1.51–2.55 mm; Dm: 2.89–3.34 mm; $Dm_{perforation}$: 0.44–1.22 mm; double-segments: L: 4.38–4.52 mm; Dm: 3.11–3.15 mm; $Dm_{perforation}$: 0.8–1.62 mm). A further 4 single- and 1 double-segments have an apple green colour, with iridizing features, and are smaller (single-segment: L: 2.38–3.52 mm; Dm: 2.52–2.81 mm; $Dm_{perforation}$: 0.62–0.70 mm; double-segment: L: 4.18 mm; Dm: 2.59 mm; $Dm_{perforation}$: 0.83 mm). b. Simple seed bead of opaque black colour, manufactured by winding. It has a round shape, with a short pear-shape profile. The originally polished surface exhibits advanced exfoliation. L: 1.96 mm; Dm: 2.52 mm; $Dm_{perforation}$: 0.85 mm. c. 1 fragmentary preserved, cylindrical glass bead of translucent, cobalt-blue colour, manufactured by drawing. $L_{fragment}$: 4.86 mm; Dm: 3.15 mm. d. 2 polyhedral beads made of sheet metal, found in each other's proximity. L: 2.74/3.2 mm; Dm: 2.68/3.20 mm; $Dm_{perforation}$: 1.68 (in both cases); Weight: 0.06/0.09 g; e. Deformed tubular bead made of sheet metal. It has a cylindrical shape, with circular cross-section. L: 5.68 mm; Dm: 2.71 mm; $Dm_{perforation}$: 1.13 mm; Weight: 0.05 g. (Pl. 1/1.4). 6. Small *object* (pendant?) made of silver plate. L: 16 mm; W: 11.8 mm. (Pl. 1/1.6).

Grave 2 (Cx. 82) – Pl. 2–3

O: W–E (280°); **L**: 2.05 m; **W**: 0.8 m; **D**: -0.58 m; **Age**: –; **Sex**: –.

Grave pit: Rectangular grave with rounded corners, vertical long side wall, stepped western, short side wall, and flat bottom. The fill is yellowish-brown and clayey. **Reopening**: The reopening extended almost on the entire surface of the grave. Its shape is elongated-oval, narrowing towards the bottom, the fill is blackish with yellow clay patches. **Coffin**: –. **Position of the skeleton**: A few teeth were recovered from the fill, but no other bones were found. **Grave goods**: 1. Murga type *jug* with handle discovered in the southwest corner of the grave, on a step, in completable, intact condition. It was thrown on the fast wheel, fired in reducing atmosphere, made of fine, well-levigated fabric, with a light grey broken surface and dark grey polished surface. Its thickening rim is curvedly everted, the shoulder is conical, the lower third of the body is curvedly widening, the disc-like base is narrow and flat. The shallowly grooved, oval-shaped, strap handle emerges from the smooth rib running around the upper part of the neck and joins the widening part of the segmented body. It is not clear whether the belly carries a smoothed-in ornament. Dm_{rim}: 115 mm; H: 251 mm; Dm_{base}: 74 mm. (Pl. 2/2.2; 46/2). 2. Ceramic *pot* discovered in the southwest corner, next to the base of the stepped wall, on the bottom of the grave, in completable, intact condition. It is hand-made and fired in oxidized atmosphere. The surface is irregularly coloured. Dm_{rim}: 126 mm; H: 204 mm; Dm_{base}: 95 mm. (Pl. 3/2.1). 3. Corroded iron *spearhead* with closed socket and elongated leaf-shaped blade, presumably in secondary position, in an almost vertical position at the western end of the grave. It is slightly widened at the point where the blade joins the socket. The length of the spearhead blade is nearly the same as the length of the socket. L: 225 mm; Dm_{socket}: 28 mm; W_{blade}: 45 mm; Th_{blade}: 14 mm. (Pl. 2/2.3). 4. Curved iron *knife* with the handle in upper position. Dimensions of the blade without the tang: L: 100 mm (?); W: 21 mm; Th: 5 mm. (Pl. 3/2.2). 5. Four *copper alloy fragments* in the fill (possibly rivets?). (Pl. 3/2.3).

Grave 3 (Cx. 83) – Pl. 4

O: W–E (276°); **L**: 1.2 m; **W**: 0.7 m; D: -0.58 m; **Age**: –; **Sex**: –.

Grave pit: Elongated oval-shaped grave with vertical walls, flat bottom and yellowish-brown, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 4 (Cx. 84) – Pl. 4
O: W–E (262°); **L**: 1.96 m; **W**: 0.58 m; **D**: -0.4 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical long side wall, stepped western, short side wall, and flat bottom. The fill is yellowish-brown and clayey. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit has an irregular elongated-oval shape, narrowing towards the bottom; the fill is black with yellow clay patches. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Ceramic *jug* found in the western part of the grave, in a fragmentary and incomplete state. It was thrown on the fast wheel, made of well-levigated, fine fabric and fired in reducing atmosphere. It has a medium grey matte surface. The vessel has a slightly thickened, rounded rim, curved neck and globular body, the base is missing. Dm_{rim}: 82 mm; preserved H: 164 mm. (Pl. 4/4.2; 46/3). 2. 11 small *glass fragments* belonging to a vessel, found in the fill of the grave. The shape of the vessel cannot be reconstructed; it was made of transparent, colourless glass. Four fragments have blue trailed decoration marvered flush with the vessel wall surface. Th: 0.8–2 mm. (Fig. 35).

Grave 5 (Cx. 85) – Pl. 4
O: W–E (270°); **L**: 1.2 m; **W**: 0.55 m; **D**: -0.33 m; **Age**: –; **Sex**: –.
Grave pit: Oval-shaped grave with stepped long side walls, vertical short side wall and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is oval, narrowing towards the bottom, with black fill. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 6 (Cx. 86) – Pl. 3
O: W–E (272°); **L**: 1.7 m; **W**: 0.75 m; **D**: -0.61 m; **Age**: –; **Sex**: –.
Grave pit: Elongated oval-shaped grave with vertical walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening covered almost the entire surface of the grave. The reopening pit is oblong-oval shaped, narrowing towards the bottom, with blackish-dark brown fill. **Coffin**: –. **Position of the skeleton**: Impressions of poorly preserved human bones and teeth were found at the bottom of the grave pit. **Grave goods**: 1. 31 glass *beads*, found in secondary position, all clustering together, in the southwest end of the grave. a. 28 round glass seed beads of opaque black colour, manufactured by winding. Initially polished, most of the specimens exhibit extensive exfoliation. L: 2.21–3.54 mm; Dm: 2.77–4.06 mm; $Dm_{perforation}$: 0.85–1.75 mm; b. 3 glass seed beads of translucent green colour, manufactured by drawing. They are round, with oblate or short concave truncated biconical profiles. L: 1.87–2.5 mm; Dm: 2.82–3.08 mm; $Dm_{perforation}$: 0.8–1.17 mm. (Pl. 3/6.5). 2. Silver *buckle* found in secondary position. Large part of the small oval buckle ring is missing. Dm: 16 × 10 mm; Th: 3 mm. (Pl. 3/6.4). 3. Fragmentary silver sheet *ring* with undecorated surface, found in secondary position, in the fill. Dm: 23 mm; W: 2 mm; Th: 1 mm. (Pl. 3/6.3). 4. In the centre of the grave two fragments of a straight iron *knife* with the handle in upper position. Preserved L: 120 mm, of which the tang was 30 mm long before removed. Dimensions of the blade based on the fragments: W: 14 mm; Th: 6 mm. (Pl. 3/6.2).

Grave 7 (Cx. 87) – Pl. 4
O: W–E (272°); **L**: 1.18 m; **W**: 0.5 m; **D**: 0.45 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners. Its outline and base were probably partially destroyed by the reopening. **Reopening**: The reopening extended over the entire surface of the

grave, it was wider at the western end than the grave pit. It narrows towards the bottom, deeper at the eastern end, the fill is black, mixed with yellowish brown clay. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 8 (Cx. 88) – Pl. 5
O: W–E (250°); **L**: 0.8 m; **W**: 0.3 m; **D**: 0.22 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical walls and flat bottom. **Reopening**: The reopening covered the entire surface of the grave, the top 0.20 m of the fill was black, with yellowish brown clay underneath. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 9 (Cx. 89) – Pl. 5
O: WSW–ENE (264°); **L**: 1.5 m; **W**: 0.8 m; **D**: 0.9 m; **Age**: Infans I (1–7); **Sex**: –.
Grave pit: Oval grave with vertical walls and flat bottom (with an animal tunnel in the centre). The northern edge was partly ruined by the reopening. **Reopening**: The reopening extended over the entire surface of the grave, and was wider than the grave at the north-eastern edge at the level of identification, then, at a shallow depth, narrowed to the outline of the grave. The fill consisted of mixed black and yellowish brown clay. **Coffin**: –. **Position of the skeleton**: At the bottom of the grave, a few very fragmentary bones were discovered in secondary position. Grave goods: 1. 16 *beads*, of different types and materials, found dispersed in the fill at various depths, all in the western half of the grave. a. 7 glass seed beads of opaque black colour, manufactured by winding. All have a round shape, with variations in their profiles (circular, short barrel-shape, and short pear shapes). Traces of a gold-coating can be observed on one specimen, the surface treatment of the rest is obscured by extensive exfoliation. L: 1.56–2.28 mm; Dm: 2.7–2.92 mm; $Dm_{perforation}$: 0.5–1.13. (Pl. 5/9.7). b. 3 simple and 1 double-segmented glass seed beads of translucent, cobalt-blue colour, manufactured by drawing. They are round-shaped, with oblate or short concave truncated biconical profiles. L: 1.8–1.84 mm; Dm: 2.94–3.26 mm; $Dm_{perforation}$: 0.98 mm (single-segments); L: 4.1 mm; Dm: 2.99 mm; $Dm_{perforation}$: 0.99 mm (double-segment). (Pl. 5/9.7). c. 1 simple glass bead, manufactured by winding. It has a round shape, with an asymmetric, flattened sphere to standard pear-shape profile. It has a dark maroon colour (appearing almost black), semi-translucent, with a shiny, polished surface. L: 7 mm; Dm: 8 mm; $Dm_{perforation}$: 3 mm. (Pl. 5/9.4). d. 1 simple glass bead, found near the previous, longitudinally broken in two fragments. It was manufactured by winding and has a round shape, with short pear-shaped profile. It has a dark maroon colour (appearing almost black), semi-translucent, with a shiny, polished surface, exhibiting several exfoliated spots, especially near the thread-hole ends. L: 6 mm; Dm: 8 mm; $Dm_{perforation}$: 2 mm. (Pl. 5/9.5). e. 1 tubular spiral wire bead. Remains of the thread can be observed in the circular thread-hole. L: 11 mm; Dm: 3 mm. (Pl. 5/9.3). f. 1 fragmentary discoid amber bead, with convex sides, found in the fill of the grave, at the north-western end of the pit. Manufactured on lathe. It has a short convex biconical profile. The thread-hole is oval, slightly cupped at the edges, the upper end exhibits a string-induced wear pattern. The upper end and the profile of the bead are decorated with a shallow circumferential groove. The whole surface exhibits several post-manufacturing alterations. L: 7 mm; Dm: 13.9 mm; $Dm_{perforation}$: 4.53 mm. (Pl. 5/9.6). 2. Fragments of a *bracelet* made from a silver plate, found in the north-western part of the grave. W: 2 mm; Th: 1 mm. (Pl. 5/9.2). 3. In the centre of the grave, in the fill, five fragments of a curved iron *knife* (?) with a heavily worn edge. It is not possible to determine how the narrow, cylindrical tang was attached to the blade. Dimensions of the blade based on the fragments: W: 12 mm; Th: 6 mm. (Pl. 5/9.8).

Grave 10 (Cx. 90/100) – Pl. 6–7
O: W–E (266°); **L**: 2.85 m; **W**: 0.75 m; **D**: 0.43 m; **Age**: Iuvenis (15–25); **Sex**: –.

Grave pit: Rectangular grave with rounded corners, vertical long side walls, stepped short side walls, and flat bottom. The fill is brownish-yellow and clayey. **Reopening**: The reopening covered the entire surface of the grave. At the level of identification, it had the form of two black spots that formed the top fill of the reopening pit. The lower fill consisted of yellowish-brown clay mixed with black. **Coffin**: –. **Position of the skeleton**: The remains of poorly preserved bones and those of a skull were discovered in secondary position at the bottom of the western end of the grave. **Grave goods**: 1. In the western part of the grave, near the skull, very small shards of a glass *vessel*, which could not be lifted. 2. 243 *beads*, in secondary position, found in the western half of the grave: a. 226 seed beads, clustered with a few exceptions mainly among the main bulk of the disturbed human remains: a1. 182 intact and 5 partially preserved glass seed beads of opaque, black colour, manufactured by winding. All have round shapes, with circular, short barrel, short and standard pear-shaped profiles, their perforation is slightly conical, round-sectioned. Shallow helical grooves can be observed on their surface. L: 1.6–2.7 mm; Dm: 2.42–3.06 mm; $Dm_{perforation}$: 0.65–1.46 mm. (Pl. 7/10.10). a2. 34 intact and 5 partially preserved, opaque, jade-green seed beads, manufactured by drawing and segmenting. They are round, with oblate profiles, exhibiting almost discoid shapes. Their perforation is plane, round-sectioned, with constricted, umbilical ends. L: 1.96–3.15 mm; Dm: 3.82–5.04 mm; $Dm_{perforation}$: 0.96–1.33 mm. (Pl. 7/10.10). b. 11 intact and 3 fragmented glass beads, clustered together in the western area of the grave: b1. 1 opaque, black glass bead, manufactured by winding. It is doughnut-shaped, with short, oblate profiles. Its perforation is large, cylindrical, with a circular section, and rounded ends. L: 3.80 mm; Dm: 9 mm; $Dm_{perforation}$: 3.30 mm. (Pl. 6/10.8; 45/5). b2. 1 polyhedral bead made of semi-translucent, dark marine blue, almost black appearing glass. The perforation is funnel-shaped at both ends, cylindrical in its mid-section. The facets exhibit macroscopically visible lines of abrasion. L: 11.63 mm; W: 8.95 mm; $Dm_{perforation}$: 3.83 mm. (Pl. 7/10.5; 45/5). b3. 1 round bead, manufactured of transparent, colourless glass by winding. The profiles are asymmetric, with one short truncated convex biconical side, and one circular. The glass fibres exhibit a helical pattern. L: 10.03 mm; Dm: 14.72 mm; $Dm_{perforation}$: 3.8 mm (top end) – 4.73 mm (base). (Pl. 6/10.7; 45/5). b4. 1 round bead with a slightly oval cross-section, manufactured of semi-transparent, dark greyish lime-green glass by winding. L: 10.64 mm; Dm: 14.87 × 15.89 mm; $Dm_{perforation}$: 3.55 mm (top end) – 4.5 mm (base). (Pl. 6/10.6; 45/5). b5. 1 semi-transparent, olive-green glass bead, manufactured by winding. It has a flattened sphere shape, with asymmetric, circular to oblate profiles. The perforation is conical, but deformed at both ends. L: 9.46 mm; Dm: 15.71 mm; $Dm_{perforation}$: 3.97 mm (base) – 6 × 3.9 mm (top). (Pl. 7/10.6; 45/5). b6. 1 semi-translucent, dark green (appearing almost black) glass bead, manufactured by winding. It has a round shape, with asymmetric longitudinal section, oblate profiles, and conical, round-sectioned perforation. L: 9.14–9.29 mm; Dm: 15.67 × 15.96 mm; $Dm_{perforation}$: 3.88 mm. (Pl. 7/10.2; 45/5). b7. 1 semi-translucent, dark malachite-green glass bead, manufactured by winding. It has a flattened sphere shape, with short, oblate profiles and large, cylindrical perforation. Helical discolorations indicate the structure of the glass fibres. The surface is polished and smooth. L: 7.71 mm; Dm: 15.23 × 16.44 mm; $Dm_{perforation}$: 4.98 × 5.62 mm. (Pl. 7/10.1; 45/5). b8. 1 semi-transparent, dark greyish lime-green glass bead, manufactured by winding. Round shaped, with asymmetric, biconical to oblate profiles. The perforation is conical, with a slightly angular cross-section. The glass fibres are arranged in a helical pattern. L: 9.08 mm; Dm: 16.66 × 17.62 mm; $Dm_{perforation}$: 3.34 mm (top end) – 4.35 mm (base). (Pl. 6/10.5; 45/5). b9. 1 translucent, spring green glass bead, manufactured by winding. It has an asymmetric, short truncated convex biconical shape and a cylindrical perforation. Darker helical discolorations indicate the structuring of the glass fibres. The surface is smooth. L: 10.29 mm; Dm: 16.25 × 16.93 mm; $Dm_{perforation}$: 4.7 × 4.95 mm. (Pl. 6/10.4; Pl. 45/5). b10. 1 glass bead of translucent, dark greyish pistachio colour, manufactured by winding. It has an asymmetric, short truncated convex biconical shape, with a cylindrical, round-sectioned perforation. L: 9.66 mm; Dm: 16.95 mm; $Dm_{perforation}$: 4.7 mm. (Pl. 7/10.7; 45/5). b11. 1 glass bead of translucent, dark lime green colour, manufactured by winding and marvering. It has

an asymmetric, short truncated convex conical shape, with the base marvered flat and a cylindrical perforation. L: 8.06 mm; Dm: 19.23 mm; $Dm_{perforation}$: 7.47 mm. (Pl. 7/10.8; 45/5). b12. Fragments of a semi-transparent, olive-green glass bead, manufactured by winding. It had a truncated short convex biconical shape, and a cylindrical perforation. L: 8.23 mm; Dm: approx. 16.5 mm; $Dm_{perforation}$: approx. 5.09 mm. b13. Fragmentary bead manufactured of transparent, colourless glass by winding. It had a short, truncated convex biconical shape. (Pl. 7/10.9) The surface of the fragments exhibits helical grooves. No measurements could be taken. b14. Fragments of a translucent, lime-green glass bead, manufactured by winding. c. 2 amber beads, found in secondary position, in the proximity of each other, at different heights, positioned in the area of the right arm. c1. 1 hand-carved amber bead, preserved in a fragmented state. It has a truncated conical shape, rendered asymmetric by extended wear. The perforation is cylindrical, the surface is extensively patinated. L: 9.84 mm; Dm: 15.15 mm; $Dm_{perforation}$: 3.22 mm. (Pl. 7/10.3; 45/5). c2. 1 partially preserved hand carved amber bead with a short barrel shape and a cylindrical, round-sectioned perforation. The majority of its surface is smooth, except for the thread-hole faces. L: 14.02 mm; Dm: 24.6 mm; $Dm_{perforation}$: 3.7 mm. (Pl. 7/10.4; 45/5). d. 1 tubular bead, manufactured of a thin metal sheet, by folding. It has a tubular shape, with circular cross-section. L: 5.4 mm; Dm: 3.3 mm. (Pl. 6/10.3). 3. Small *iron fragment* in secondary position. (Pl. 6/10.2).

Grave 11 (Cx. 91) – Pl. 8
O: W–E (275°); **L**: 2.42 m; **W**: 0.9 m; **D**: 0.56 m; **Age**: Infans I (5–7); **Sex**: –.
Grave pit: Rectangular grave with rounded corners, stepped side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening extended almost on the entire surface of the grave, except for the two ends. The reopening pit is irregular oval in shape, tapering towards the bottom, the upper part of the fill is blackish-dark brown, while the lower part is yellowish-brown clay mixed with black. **Coffin**: The impression of a log coffin was identified at the bottom of the grave. **Position of the skeleton**: The remains of a few poorly preserved bones in secondary position were found at the bottom of the grave. **Grave goods**: 1. 16 *beads* discovered dispersed in the central part of the grave: a. 12 glass seed beads, manufactured by winding. All have a round shape, with varied profiles (circular, short barrel, short pear-shape) and are made of opaque black glass with traces of thin, gold-coloured coating. L: 2–3.5 mm; Dm: 3–4 mm; $Dm_{perforation}$: 1.5–2 mm. (Pl. 8/11.8; 45/6). b. 2 crumb beads, manufactured by winding, found in secondary position, in the central part of the grave. They are round, with an asymmetric, barrel-shaped cross-section. Their base colour is dark blue (almost black appearing) and opaque. Their surface is decorated with haphazardly placed brownish-red, white and light blue crumbs, often overlapping, marvered flush with the surface. The specimens exhibit different grades of decay. L: 11.4 / 11.9 mm; Dm: 16.10 / 15.10 mm; $Dm_{perforation}$: 4.8 / 6.20 mm. (Pl. 8/11.6–7; 45/6). c. 1 tubular bead made of metal sheet. It has a short cylindrical shape, with a round cross section. (Pl. 8/11.8). d. 1 polyhedral carnelian bead, found together with the seed beads. One of the thread-hole ends is damaged. The edges of the facets exhibit wear/use-related rounding. Preserved L: 15.87 mm; Dm: 10.35 × 7.05 mm; $Dm_{perforation}$: 2.65 mm. (Pl. 8/11.3; 45/6). 2. Iron *buckle* in secondary position, in the central part of the grave. The oval buckle ring has ribbed decoration; the tongue is semicircular in section. $Dm_{buckle\ ring}$: 39 × 27 mm; Th: 8 mm; L_{pin}: 25 mm. (Pl. 8/11.4). 3. In the central part of the grave, among the bones in secondary position, spiral-shaped silver *finger ring* with a phalange in it. Dm: 24 mm; H: 13 mm. (Pl. 8/11.5). 4. Polyhedral *bead* (?) or button of an *earring* (?) made of quartzite. The ring made of silver wire is broken. L: 14 mm; W: 11 mm. (Pl. 8/11.2).

Grave 12 (Cx. 92) – Pl. 5
O: W–E (273°); **L**: 2.49 m; **W**: 1.12 m; **D**: 0.59 m; **Age**: Adultus (>23); **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and

brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is oval, narrowing towards the bottom, with mixed, blackish-dark brown fill. **Coffin**: At the bottom of the grave, the impression of a log (?) coffin was visible. **Position of the skeleton**: The remains of poorly preserved bones in secondary position were discovered at the bottom of the grave. **Grave goods**: 1. 2 seed *beads*, found in secondary position, in each other's proximity, in the western half of the grave: a. 1 round glass seed bead of opaque, black colour, manufactured by winding. L: 2.72 mm; Dm: 3.31 mm; $Dm_{perforation}$: 0.88 mm (top end) – 1.66 (base) mm. (Pl. 5/12.2). b. 1 glass seed bead of semi-translucent, mint-green colour, manufactured by drawing. It has a round shape, with short barrel-shaped profile. L: 1.89 mm; Dm: 2.46 mm; $Dm_{perforation}$: 0.3 mm. (Pl. 5/12.3).

Grave 13 (Cx. 93) – Pl. 7
O: W–E (276°); **L**: 2.3 m; **W**: 0.66 m; **D**: -0.64 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls and flat bottom. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is elongated-oval in shape, with uneven base and mixed blackish-dark brown fill. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Small *iron fragment* in the fill. (Pl. 7/13.2).

Grave 14 (Cx. 94) – Pl. 9
O: W–E (270°); **L**: 2.3 m; **W**: 0.8 m; **D**: -0.72 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit has an irregular rectangle shape, narrowing towards the bottom, and mixed, blackish-dark brown fill. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Ceramic *jug* with handle discovered in fragments, scattered on the bottom of the grave, in the central part, and the fill. It was thrown on the fast wheel, made of well-levigated, fine and porous fabric with fine-grained calcite in places and fired in reducing atmosphere. It has medium-grey colour. The originally burnished surface has survived only in patches of peeling, flaking shell. The rim is rounded and the perpendicular neck is sharply separated from the upper part of the conical shoulder. At the lower part of the shoulder there is a simple rib decoration. The body was probably globular, the lower third and bottom of the vessel are missing. The arched, double-grooved, oval-sectioned strap handle starts from the lower part of the neck and is connected to the widening part of the belly. Dm_{rim}: 68 mm; H (preserved part): 113 mm. (Pl. 9/14.2).

Grave 15 (Cx. 95) – Pl. 8
O: W–E (283°); **L**: 2 m; **W**: 0.8 m; **D**: -0.35 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is rectangular with rounded corners, tapering towards the bottom, and has a blackish-dark brown fill. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Undecorated, oval copper alloy *buckle*, discovered in the fill, in secondary position. Dm: 30 mm; Th: 5 mm. (Pl. 8/15.2).

Grave 16 (Cx. 96) – Pl. 9
O: W–E (274°); **L**: 2.1 m; **W**: 0.72 m; **D**: -0.57 m; **Age**: Infans I (?); **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the almost entire surface of the grave, except for its western end. The reopening pit is elongated-oval in shape, its bottom narrowing towards east, the fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: Only a few tooth fragments were

discovered. **Grave goods**: 1. Tubular *iron fragment*, possibly part of a socket, found in the eastern half of the grave. L: 50 mm; W: 17 mm. (Pl. 9/16.2).

Grave 17 (Cx. 97) – Pl. 10

O: W–E (284°); **L**: 1.3 m; **W**: 0.42 m; **D**: -0.36 m; **Age**: Infans I (4–5); **Sex**: –.

Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The opening affected almost the entire surface of the grave. The reopening pit is irregular rectangle in shape, with rounded corners, with a slightly bulging west wall, an oblique east wall, uneven base, and blackish-dark brown, mixed fill. **Coffin**: –. **Position of the skeleton**: Two teeth were recovered from the fill. **Grave goods**: –.

Grave 18 (Cx. 98) – Pl. 10

O: W–E (269°); **L**: 1.85 m; **W**: 0.76 m; **D**: -0.4 m; **Age**: Adultus (20–30); **Sex**: –.

Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening extended on the western and central third of the grave. The reopening pit is irregular oval in shape, with uneven bottom and blackish-dark brown mixed fill. **Coffin**: –. **Position of the skeleton**: Teeth were found and minor bone impressions were observed in the fill, but the latter could not be recovered. **Grave goods**: 1. 5 *beads* recovered from the fill of the reopening pit: a. 1 round, opaque, dark red seed bead, manufactured by drawing. L: 2.92 mm; Dm: 3.79 mm; $Dm_{perforation}$: 0.5 mm. (Pl. 10/18.4). b. 1 round, opaque, jade-green seed bead, manufactured by drawing. L: 2.12 mm; Dm: 3.27 mm; $Dm_{perforation}$: 1 mm. (Pl. 10/18.5). c. 1 semi-translucent, light yellow seed bead of asymmetric biconical shape, manufactured by drawing. L: 3.94 mm; Dm: 3.38 mm; $Dm_{perforation}$: 1 mm. (Pl. 10/18.3). d. 1 fragmented, biconical, translucent seed bead of cobalt-blue colour, manufactured by drawing. L: 4 mm; Dm: 3.73 mm; $Dm_{perforation}$: 1 mm. (Pl. 10/18.2). e. 1 partially preserved tubular bead made of sheet metal. It has an asymmetric cylindrical shape, with circular cross-section. L: 5.5 mm; Dm: 3.61 mm; $Dm_{perforation}$: 1.86 mm; Weight: 0.15 g. (Pl. 10/18.6).

Grave 19 (Cx. 99) – Pl. 10

O: WSW–ENE (259°); **L**: 1.85 m; **W**: 0.67 m; **D**: -0.49 m; **Age**: (Infans I?); **Sex**: –.

Grave pit: Elongated-oval grave with possibly stepped side walls, flat bottom and brownish-yellow, clayey fill. At the bottom of the grave, rubble was discovered. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is oval in shape, with a deepening towards west; the fill is blackish-dark brown, mixed with daub and small stones. **Coffin**: In the south-western part, at the bottom of the grave, the impression of a log coffin was identified. **Position of the skeleton**: Only one tooth has been preserved. **Grave goods**: 1. Ceramic *cup* discovered on a step built on the central part of the southern wall of the grave, relatively intact, presumably in its original position. It was hand-built and subsequently hand-wheeled, made of coarse fabric, tempered with sand and crushed small pebbles, fired in oxidizing atmosphere, and then reduced to a dark grey colour. The surface has brick red patches in places. It has a rounded rim, conical, somewhat arched sides, and slightly protruding bottom. Dm_{rim}: 57 mm; H: 50 mm; Dm_{base}: 37 mm. (Pl. 10/19.4; 47/4). 2. At the bottom of the grave, next to the southern wall, found in secondary position, a fragment of a small silver *buckle* with a tongue with semicircular section. More than half of the buckle ring is missing. $D_{buckle\ ring}$: 17 × 12 mm; Th: 5 mm; L_{pin}: 17 mm. (Pl. 10/19.3). 3. Small *iron fragment*. (Pl. 10/19.2).

Grave 20 (Cx. 101) – Pl. 11

O: WNW–SSE (289°); **L**: 1.75 m; **W**: 0.5 m; **D**: -0.45 m; **Age**: –; **Sex**: –.

Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is elongated oval-shaped, with an uneven bottom; the fill is blackish-dark brown, mixed with

yellow clay. **Coffin**: –. **Position of the skeleton**: A few human teeth were recovered from the fill. **Grave goods**: 1. 19 glass *beads* discovered in secondary position, in the western part of the grave: a. 6 opaque, black seed beads, manufactured by winding. They are round shaped, with spherical, oblate, standard barrel, and short pear-shaped profile variations. Their surface is largely rendered matte due to post-depositional corrosion. L: 2.15 mm; Dm: 2.66 mm; $Dm_{perforation}$: 1.39 mm. (Pl. 11/20.3). b. 1 double-segmented glass bead of opaque, brick-red colour, made by drawing. L: 7.27 mm; Dm: 4.06 mm; $Dm_{perforation}$: 1.5 mm. (Pl. 11/20.2). c. 9 round seed beads (6 single- and 3 double-segmented), manufactured by drawing. Variations regarding their colour and size indicate two separate sets: 1 single- and 1 double-segment specimen has a darker, surf green colour, and a larger size (single-segment: L: 2.26 mm; Dm: 3.27 mm; $Dm_{perforation}$: 1.22 mm; double-segmented: L: 4.19 mm; Dm: 3 mm; $Dm_{perforation}$: 1 mm), while 5 single- and 2 double-segments have an apple-green colour, and a smaller size (single-segment: L: cca. 1.66 mm; Dm: cca. 2.89 mm; $Dm_{perforation}$: 1.22 mm; double-segmented: L: 3.58 mm; Dm: 2.59 mm; $Dm_{perforation}$: 1 mm). (Pl. 11/20.2–3). d. 3 simple glass beads of opaque, dark-maroon (almost black appearing) colour with yellowish brown corrosion, manufactured by winding. They have a more or less pronounced biconical shape. d1. L: 6.26 mm; D: 9.87 mm; $Dm_{perforation}$: 3.25 mm; d2. L: 7.15 mm; D: 10.58 mm; $Dm_{perforation}$: 3.86 mm. d3. L: 7.49 mm; D: 12.36 mm; $Dm_{perforation}$: 3.65 mm. (Pl. 11/20.4). 2. Curved iron *knife* with the handle in upper position. Its shape was restorable from fragments. L: 92 mm; W: 12 mm (of which the tang 20 mm); Th: 5 mm. (Pl. 11/20.5).

Grave 21 (Cx. 102) – Pl. 12

O: W–E (273°); **L**: 1.5 m; **W**: 0.5 m; **D**: -0.36 m; **Age**: –; **Sex**: –.

Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected almost the entire surface of the grave. The reopening is rectangular with rounded corners, its bottom narrows towards east, the fill is blackish-dark brown, mixed with yellow clay. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. 1 semi-translucent green glass seed *bead* of short biconical shape, manufactured by drawing, found in secondary position in the fill. L: 2.4 mm; D: 2.65 mm; $Dm_{perforation}$: 1.3 mm. (Pl. 12/21.2).

Grave 22 (Cx. 103) – Pl. 12

O: W–E (274°); **L**: 2.32 m; **W**: 0.7 m; **D**: 0.36 m; **Age**: –; **Sex**: –.

Grave pit: Oblong-oval shaped grave with stepped longitudinal sidewalls, probably due to the wider reopening pit, the western sidewall is vertical, the bottom is flat. The fill consisted of brownish-yellow, clayey silt. **Reopening**: The reopening extended on the western and middle third of the grave, and was probably wider than the grave. The reopening pit is oval in shape, tapering towards the bottom, and filled with a blackish-brown fill. **Coffin**: The impression of a log coffin with a better-preserved western part was identified on the bottom of the grave. **Position of the skeleton**: On the bottom of the grave, at its eastern end, the remains of two poorly preserved long bones (presumably tibiae) were found, probably slightly displaced from their original position. A third long bone was lying next to them in secondary position. The rest of the skeleton is missing. **Grave goods**: 1. In the western third of the grave, a gilded silver *cicada brooch* in secondary position. The bulging eyes on the head are inlaid with black glass paste, the embossed nose is decorated with punched dots. The neck is framed by three circular ribs on each side and decorated with an incised wavy line and dots with niello inlay. The body is divided in three parts: the abdomen in the middle and two wings with rounded tips on the sides. The spring of the brooch is preserved; the pin is missing. The gilding shows heavy signs of wear over a large part of the surface. L: 36 mm; W_{wing}: 20 mm; W_{neck}: 7 mm; W_{head}: 8 mm. (Pl. 12/22.8; 43/11). 2. 40 *beads* of various types and materials, recovered from the western end of the grave, with the exception of a couple of black seed beads, which were

positioned in the central area: a. 35 opaque, black seed beads, manufactured by winding. They are round with varied (spherical, oblate and short pear-shaped) profiles. 6 pieces exhibit traces of thin, gold-coloured coating. L: 2.6–2.7 mm; Dm: 3.50–3.87 mm. (Pl. 12/22.3; 45/4). b. 1 crumb bead of flattened globular shape, manufactured by winding. It is made of opaque, dark blue glass and decorated with haphazardly placed brownish-red and white crumbs, often overlapping, marvered flush with the surface. L: 11.36 mm; Dm: 15 mm; $Dm_{perforation}$: 4.31 mm. (Pl. 12/22.4; 45/4). c. 1 tubular bead, manufactured of a thin metal sheet. It has a somewhat rectangular cylindrical shape. L: 7.59 mm; Dm: 4.59–4.82 mm; $Dm_{perforation}$: 1.63–2.11 mm; W: 7.5 g. (Pl. 12/22.6; 45/4). d. 1 partially preserved tubular bead made of a thin metal sheet. L: 6.92 mm; Dm: –; $Dm_{perforation}$: –; $W_{fragment}$: 0.4 g. e. 1 partially preserved lenticular object, made of a metal sheet. It has a discoid shape, with convex conical profiles, and a concave base. L: 5 mm; Dm: 10.46 mm; $Dm_{perforation}$: 2.4 mm; Weight: 4.9 g. (Pl. 12/22.7). f: Fragments of translucent, lime-green glass bead. 3. Ceramic *cup* found in secondary position in the eastern part of the grave, next to two long bones. It is hand-built, of dark grey colour, made of coarse fabric, tempered with sand, and fired in reducing atmosphere. The rounded and everted rim grows thin, the less carefully modelled sides are conical, and the base is flat. Dm_{rim}: 74 mm; H: 62 mm; Dm_{base}: 50 mm. (Pl. 12/22.2; 47/5). 4. Fragmented iron *knife*, straight, with a slightly worn edge and the handle in middle position, found in secondary position. L: 130 mm (of which the preserved tang 20 mm); W: 22 mm; Th: 10 mm. (Pl. 12/22.5).

Grave 23 (Cx. 104) – Pl. 11
O: W–E (278°); **L**: 1.93 m; **W**: 0.63 m; **D**: -0.49 m; **Age**: Infans I (3–6); **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical longitudinal and east side walls, stepped west side wall, flat bottom, and brownish-yellow, clayey fill. On the bottom of the grave, a stone was unearthed. **Reopening**: The reopening affected the western and middle third of the grave. The reopening pit is elongated-oval, narrowing towards the bottom, the fill is blackish-dark brown, mixed with yellow clay. **Coffin**: –. **Position of the skeleton**: On the bottom of the grave, the remains of poorly preserved long bones and teeth in secondary position were discovered. **Grave goods**: 1. In the western part of the grave, a medium-sized silver *buckle* in secondary position. The buckle ring is kidney-shaped; the rectangular base of the tongue with semi-circular section is decorated with two notches. $D_{buckle\ ring}$: 24 × 15 mm; Th: 8 mm; L_{pin}: 19 mm. (Pl. 11/23.4). 2. 32 glass *beads*, of various types, found dispersed on the bottom of the grave, clustering mainly in the central part: a. 29 opaque, black seed beads, manufactured by winding. They have a round shape, with varied (circular, short and standard barrel, and short pear-shape) profiles. 3 pieces exhibit traces of thin, gold-coloured coating. L: 1.5–3 mm; Dm: 2.5–3 mm; $Dm_{perforation}$: 1–1.8 mm. (Pl. 11/23.3). b. 1 fragmentary, double-segmented seed bead of translucent, cobalt-blue colour, manufactured by drawing. L: cca. 7 mm; Dm: 4 mm; $Dm_{perforation}$: 1 mm. (Pl. 11/23.3). c. 1 cylindrical glass bead of semi-translucent, jade-green colour, manufactured by drawing. L: 6.53 mm; Dm: 2.88 mm; $Dm_{perforation}$: 1.77 mm. (Pl. 11/23.3). d. 1 flattened globular glass bead of dark red colour, manufactured by winding. L: 9.46 mm; Dm: 11.42 mm; $Dm_{perforation}$: 4.11 mm. (Pl. 11/23.2). 3. Wheel-thrown, asymmetrical, double-conic, grey-spotted brick-coloured *spindle-whorl*, discovered in the centre of the grave, next to the right tibia. Its wider end has a concave base; its upper half is cut. Dm: 35 mm; H: 16 mm; Dm_{hole}: 8 mm. (Pl. 11/23.5; 43/10).

Grave 24 (Cx. 105) – Pl. 13
O: W–E (281°); **L**: 2.45 m; **W**: 0.65 m; **D**: -0.35 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave pit. The reopening pit is elongated-oval, narrowing towards the bottom, the fill is blackish-dark brown, mixed with yellow clay. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1.

Fragments of a straight (?) iron *knife* with the handle in middle position from the fill of the reopening pit. The tang is wide (12 mm) in proportion to the blade, its preserved length is 20 mm. Dimensions of the blade based on the fragments: W: 16 mm; Th: 6 mm. (Pl. 13/24.2).

Grave 25 (Cx. 106) – Pl. 14
O: W–E (266°); **L**: 2.39 m; **W**: 0.78 m; **D**: -0.62 m; **Age**: Adultus (>40); **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical longitudinal side walls, stepped west side wall, flat bottom, and brownish-yellow, clayey fill. The east end of the grave pit was destroyed by the excavator. **Reopening**: The reopening affected the eastern and middle third of the grave. The reopening pit is elongated-oval in shape, narrowing towards the bottom, the fill is black in the upper part, and blackish-dark brown, mixed with yellow clay underneath. **Coffin**: The imprint of the coffin was relatively well identifiable. **Position of the skeleton**: The remains of a poorly preserved skull were excavated in the western end of the grave, and further long bone fragments in secondary position were recovered from the bottom. **Grave goods**: 1. Ceramic *jug* found in the western part of the grave, broken in several pieces that could be assembled; it is incomplete. It is thrown on the fast wheel, made of well-levigated, fine fabric, reduction fired, and has medium grey, matte surface. The originally burnished surface survives in places only in peeling, flaking patches. It has a slightly thickened, rounded rim, curved neck, conical shoulder and globular body; the base is missing. Dm_{rim}: 86 mm; preserved H: 217 mm. (Pl. 14/25.2; 46/4). 2. In the western half of the grave, near the skull, in secondary position, an oval iron *buckle* with a tongue with semi-circular section. L: 31 mm; W: 42 mm. (Pl. 14/25.4). 3. In the western half of the grave, near the skull, a small copper alloy *buckle* in secondary position. The buckle ring is circular, a part of it is missing; the tongue is semi-circular in section. Undecorated. Dm: 16 × 15 mm. (Pl. 14/25.6). 4. In the same place, a *buckle* of the same type as the previous item, in a more fragmentary state. Dm: 13 × 12 mm. (Pl. 14/25.5). 5. In the north-western half of the grave, next to the skull (?), three fragments of a straight iron *knife* with the handle in upper position (?), which together measure 74 mm in length. The blade's dimensions based on the fragments: W: 13 mm; Th: 20 mm. (Pl. 14/25.3).

Grave 26 (Cx. 107) – Pl. 13
O: W–E (272°); **L**: 2.49 m; **W**: 0.6 m; **D**: -0.3 m; **Age**: Adultus (>23); **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western and middle third of the grave. The reopening pit is oval, narrowing towards the bottom. Two fills were distinguishable: in the middle of the grave a black one, while underneath, as well as in the western part of the grave a blackish-dark brown one, mixed with yellow clay. **Coffin**: –. **Position of the skeleton**: In the western third of the grave, poorly preserved human bones in secondary position were excavated. **Grave goods**: –.

Grave 27 (Cx. 108) – Pl. 13
O: W–E (269°); **L**: 2.68 m; **W**: 0.63 m; **D**: -0.4 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western and middle part of the grave. The reopening pit is oval, narrowing towards the bottom, the fill is blackish-dark brown, mixed with yellow clay. **Coffin**: –. **Position of the skeleton**: In the grave, the imprints of bone fragments in secondary position were observed, without the possibility of being recovered. **Grave goods**: 1. Fragment of an iron *knife* with the handle in middle position from the fill of the reopening pit. L: 21 mm; W: 12 mm; Th: 6 mm. (Pl. 13/27.2).

Grave 28 (Cx. 109) – Pl. 15
O: W–E (271°); **L**: 2.79 m; **W**: 0.82 m; **D**: -0.25 m; **Age**: Adultus (>23); **Sex**: –.

Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western and middle part of the grave. The reopening pit is irregular, elongated-oval in shape, its bottom is flat; the fill is blackish-dark brown, mixed with yellow clay. **Coffin**: –. **Position of the skeleton**: On the bottom of the grave, probably in anatomical position, poorly preserved long bones and some other bones were excavated. **Grave goods**: 1. Fragments of an iron *knife* with the handle in upper position, next to human bones, in the central part of the grave. Dimensions of the blade based on the fragments: W: 15 mm; Th: 3 mm. (Pl. 15/28.2).

Grave 29 (Cx. 110) – Pl. 16
O: W–E (272°); **L**: 1.41 m; **W**: 0.47 m; **D**: -0.45 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is nearly oval in shape, slightly narrowing towards the bottom; the fill is blackish-dark brown, mixed in the eastern half with yellow, clayey soil. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 30 (Cx. 111) – Pl. 15
O: W–E (280°); **L**: 1.9 m; **W**: 0.4 m; **D**: -0.7 m; **Age**: Infans II (10–12); **Sex**: –.
Grave pit: Irregularly shaped grave with rounded corners on the west side and a curved end on the east side, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is oval in shape, slightly narrowing towards the bottom; the fill is blackish-dark brown, mixed in the middle with yellow clayey soil. **Coffin**: –. **Position of the skeleton**: In the north-west corner of the grave poorly preserved human bones were found in secondary position. **Grave goods**: –.

Grave 31 (Cx. 112) – Pl. 16
O: WSW–ENE (259°); **L**: 2.86 m; **W**: 1 m; **D**: -0.6 m; **Age**: Infans I–II (6–8); **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical longitudinal and east side wall, stepped west side wall, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected almost the entire grave. The reopening pit is irregularly shaped, slightly narrowing towards the bottom, its base is uneven; the fill is blackish-dark brown in the eastern part, heavily mixed with yellow clayey soil, and blackish-dark brown, homogeneous in the western part. **Coffin**: –. **Position of the skeleton**: Only a few teeth have been preserved. **Grave goods**: 1. Oval silver *buckle* in the fill, at a depth of -0.55 m. The rectangular base of the tongue with semicircular section is decorated with two notches. $Dm_{buckle\ ring}$: 19 × 17 mm; $Th_{buckle\ ring}$: 4 mm; L_{pin}: 17 mm; W_{pin}: 3 mm; Th_{pin}: 2 mm. (Pl. 16/31.2; 43/14).

Grave 32 (Cx. 113) – Pl. 16
O: W–E (267°); **L**: 2.3 m; **W**: 0.71 m; **D**: -0.55 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected almost the entire surface of the grave. The reopening pit is oval in shape, narrowing slightly towards the bottom, its base is uneven, and the fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 33 (Cx. 114) – Pl. 17
O: W–E (274°); **L**: 2.01 m; **W**: 0.81 m; **D**: -0.88 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical eastern and southern walls, stepped

northern and western walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the most part of the grave, excepting the western end. The reopening pit cuts through the northern side wall of the grave, its shape is oval, slightly narrowing towards the bottom, the base is flat, and the fill is blackish-dark brown, mixed in places with yellow clayey soil. **Coffin**: –. **Position of the skeleton**: In the middle of the grave, in the fill, small bone fragments were discovered. **Grave goods**: 1. 5 glass *beads*, found dispersed in the fill of the reopening pit, at different depths: a. 4 cylindrical beads, manufactured of opaque, dark red glass, by drawing. L: 6.16–6.79 mm; Dm: 2.46–3.26 mm; $Dm_{perforation}$: 0.95–1.45 mm. (Pl. 17/33.2; 45/2). b. 1 similar bead as the previous ones, of green colour. L: 5.79 mm; Dm: 2.67 mm; $Dm_{perforation}$: 0.94 mm. (Pl. 17/33.2; 45/2).

Grave 34 (Cx. 115) – Pl. 17
O: W–E (270°); **L**: 2.53 m; **W**: 0.75 m; **D**: -0.75 m; **Age**: Infans I (2–4); **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical walls, except for the north one that is stepped, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western and middle third of the grave. The reopening pit is elongated-oval, narrowing towards the bottom, its base is flat; the fill is blackish-dark brown, mixed in places with yellow clayey soil. **Coffin**: On the bottom of the grave, in the eastern side, the remains of a log coffin were identified. **Position of the skeleton**: In the western third of the grave poorly preserved human bones were found in secondary position. **Grave goods**: 1. Fragments of a straight iron *knife* with the handle in middle position, recovered from the fill of the reopening pit. Dimensions of the blade based on the fragments: W: 14 mm; Th: 3 mm. (Pl. 17/34.2).

Grave 35 (Cx. 116) – Pl. 18
O: W–E (271°); **L**: 2.5 m; **W**: 0.81 m; **D**: -0.82 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is elongated-oval, slightly narrowing towards the bottom, the fill is blackish-dark brown, mixed in places with yellow clayey soil. It cuts through the north-western wall of the grave. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Egg-shaped ceramic *vessel* found in pieces that could be joined together, on the bottom of the grave, in its western part. It was hand-built and subsequently hand-wheeled, made of coarse fabric, tempered with sand and crushed pebbles, fired in oxidizing atmosphere, and then reduced to a dark grey colour, with brownish-brick red patches. The rim is slightly curved and rounded, the neck is narrow and cylindrical, the shoulder arched, and the sides grow narrow towards the slightly concave bottom. Dm_{rim}: 60 mm; H: 90 mm; Dm_{base}: 43 mm. (Pl. 18/35.2; 47/3).

Grave 36 (Cx. 117) – Pl. 19
O: W–E (280°); **L**: 2 m; **W**: 0.6 m; **D**: -0.8 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is elongated-oval, narrowing towards the bottom, the fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 37 (Cx. 118) – Pl. 19
O: WNW–ENE (294°); **L**: 1.03 m; **W**: 0.65 m; **D**: -0.29 m; **Age**: Infans I (2–7); **Sex**: –.
Grave pit: Oblong-oval shaped grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western and middle third of the grave. The reopening pit is rectangular with rounded corners, deepening towards west; its fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: Human teeth were recovered from the reopening pit. **Grave goods**: –.

Grave 38 (Cx. 119) – Pl. 19
O: W–E (277°); **L**: 2.06 m; **W**: 0.8 m; **D**: -0.23 m; **Age**: Infans I (<6); **Sex**: –.
Grave pit: Oblong-oval shaped grave with vertical longitudinal side walls, sloping short side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The opening pit is elongated-oval in shape, narrowing towards the bottom, its fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: Five human teeth were recovered from the fill. **Grave goods**: –.

Grave 39 (Cx. 120) – Pl. 18
O: W–E (268°); **L**: 1.8 m; **W**: 0.5 m; **D**: -0.55 m; **Age**: –; **Sex**: –.
Grave pit: Oblong-oval grave with stepped side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected almost the entire surface of the grave. The shape of the reopening pit is irregular, narrowing towards the bottom, its base uneven, and the fill blackish-dark brown. **Coffin**: –. **Position of the skeleton**: On the bottom of the grave, in the western third human teeth and an imprint of human bone were discovered. **Grave goods**: 1. *Iron fragment* recovered from the fill of the reopening pit. (Pl. 18/39.2).

Grave 40 (Cx. 121) – Pl. 20
O: W–E (271°); **L**: 1.51 m; **W**: 0.5 m; **D**: -0.35 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, stepped side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the central and eastern third of the grave. The reopening pit is irregular in shape, narrowing slightly towards the bottom, its base is uneven, and the fill is blackish-dark brown, heavily mixed with yellow-brown soil. **Coffin**: On the bottom of the grave the impression of a (log?) coffin was identified. **Position of the skeleton**: On the bottom of the grave, in the central area, imprints of human bones in secondary position were discovered. **Grave goods**: 1. Oval silver *buckle*, discovered in the fill. The rectangular base of the tongue is decorated with three notched lines. Part of the buckle ring is missing. $Dm_{buckle\ ring}$: 17 × 20 mm; $Th_{buckle\ ring}$: 4 mm; L_{pin}: 17 mm; W_{pin}: 3 mm; Th_{pin}: 3 mm. (Pl. 20/40.3; 43/15). 2. Round silver *buckle* with a tongue with semicircular section, found on the bottom of the grave, in secondary position. $Dm_{buckle\ ring}$: 16 × 16 mm; $Th_{buckle\ ring}$: 3 mm; L_{pin}: 15 mm; W_{pin}: 3 mm; Th_{pin}: 1 mm. (Pl. 20/40.2). 3. On the bottom of the grave, in secondary position, several *iron fragments*. (Pl. 20/40.4).

Grave 41 (Cx. 122) – Pl. 20
O: W–E (264°); **L**: 2.17 m; **W**: 1.06 m; **D**: -0.74 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, (over-excavated in the western part), and brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is oval in shape, gradually deepening towards west; the fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 42 (Cx. 123) – Pl. 21
O: W–E (271°); **L**: 2.6 m; **W**: 0.7 m; **D**: -0.80 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is oblong-oval, the base is flat, the fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Small *iron fragment* recovered from the fill of the reopening pit. (Pl. 21/42.2).

Grave 43 (Cx. 124) – Pl. 23–27
O: W–E (271°); **L**: 2.5 m; **W**: 0.95 m; **D**: -0.63 m; **Age**: Adultus (30–39); **Sex**: Female.
Grave pit: Rectangular grave with rounded corners, stepped side walls, flat bottom, and light greyish-yellow, clayey fill. **Reopening**: –. **Coffin**: –. **Position of the skeleton**: Lying on the back with the limbs stretched, shoulders up, arms close to the body, palms on the pelvis. The skull is slightly tilted to the south. **Grave goods**: 1. Murga type *jug* found intact in the south-west corner of the grave, on a step. It is thrown on the fast wheel, made of well levigated, fine fabric, reduction fired in two stages, dark grey-coloured with a brownish-brick red colour on the fracture surface. The surface is matte and burnished. The thickening, slightly everted rim is asymmetric. The body is rounded and asymmetric in the middle third, with a narrow disc at the base. The shallowly grooved, thin strap handle with oval section starts from the smooth rib running round the neck and joins the belly decorated with shallow grooves. A smoothed-in zig-zag line runs around the articulated belly. Dm_{rim}: 90 mm; H: 295 mm; Dm_{base}: 90 mm. (Pl. 24/43.1; 46/1). 2. String made of 419 *beads* of various types and materials, found dispersed in the area of the neck: a. 233 opaque, black glass seed beads, manufactured by winding. They are round-shaped, with varied (spherical, oblate and short pear-shaped) sections. A thin gold-coloured coating can be observed on their surface, in various states of preservation. L: 1.7–3.17 mm; Dm: 2.46–3.35 mm; $Dm_{perforation}$: 0.96–1.55 mm. (Pl. 25/43.1). b. 3 similar seed beads as the previous ones, with an ellipsoid, slightly conical shape. L: 2.99–3.44 mm; Dm: 2.32–2.44 mm; $Dm_{perforation}$: 1.08–1.20 mm. (Pl. 25/43.1). c. 106 opaque, brick-red glass seed beads, manufactured by drawing: c1: 94 single-segments, with rounded shape and oblate, short barrel and short pear-shape profiles. L: 1.22–2.66 mm; Dm: 1.85–3.51 mm; $Dm_{perforation}$: 0.82–1.49 mm. c2: 9 double-segmented beads. L: 4.06–5.19 mm; Dm: 2.43–3.38 mm; $Dm_{perforation}$: 1.05–1.7 mm. c3: 1 double-segmented bead with a nine-pin (perhaps baluster) shape. L: 5.67 mm; Dm: 3.23 mm; $Dm_{perforation}$: 1.51 mm. c4: 2 triple-segmented beads. L: 6.52 / 7.49 mm; Dm: 3.01 / 3.22 mm; $Dm_{perforation}$: 1 / 0.82 mm. (Pl. 25/43.1). d: 1 partially preserved, cylindrical glass bead of opaque, brick-red colour, manufactured by drawing. L: 6.48 mm; Dm: 3.78 mm; $Dm_{perforation}$: 1.1 mm. (Pl. 25/43.1). e: 71 opaque, green glass seed beads, manufactured by drawing: e1: 68 round single-segments, with oblate, short barrel and short pear-shape profiles. L: 1.05–1.8 mm; Dm: 3.05 mm; $Dm_{perforation}$ 0.43–1.23 mm; e2: 3 double-segmented beads. L: 4.16–4.49 mm; Dm: 2.29–2.78 mm; $Dm_{perforation}$: 0.7–1.02 mm. (Pl. 25/43.1). f. 5 polyhedral sheet metal beads. L: 2.59–3.11 mm; Dm: 2.82–3.33 mm; $Dm_{perforation}$: 1.2–1.42 mm; Weight: 0.05–0.07 g. (Pl. 25/43.1). 3–4. On each shoulder, an obliquely placed *bow-brooch* cast in silver, with gilded surface. The semi-circular headplate is decorated with a chip carved pair of volutes, framed by a row of incised dots. Of the three buttons on the headplate, the central one is segmented, while the longitudinal central parts of the other two are decorated with 4 ring-and-dot motifs each. The wide bow is curved; its surface is longitudinally segmented. The central band is decorated with rings-and-dots. The elongated rhombic footplate is decorated with chip carved concentric rhombuses. The brooches end in a stylised animal head. The nose is framed by two dents decorated with punched semicircular motifs. The engraved almond-shaped eyes are slanted. The central part of the forehead is decorated with vertically arranged, punched circular motifs. The fastening system of one of the brooches is preserved, while only the spring has remained from the other, the pin is broken off. The gilded surface of both brooches shows signs of heavy wear in places. 3: H: 83 mm; W_{foot}: 21 mm; W_{head}: 46 mm. 4: H: 81 mm; W_{foot}: 20 mm; W_{head}: 42 mm. (Pl. 26/43.1–2; 42/1–2). 5. Fragmentary silver *pin*, placed obliquely on the right side of the chest. The surface is undecorated. H: 79 mm; Th: 3 mm. (Pl. 26/43.3). 6. 2 *beads* positioned together on the lower-left side of the ribcage, left to the distal end of the sternum: a. 1 opaque, black glass bead with a shiny surface, manufactured by winding. It has a slightly asymmetrical, short barrel shaped profile and is decorated with an applied, white, continuous wavy line, protruding from the surface. Two additional irregular spots can be observed from the same white paste around the upper end of the perforation. L: 9 mm; Dm: 13.5 mm; $Dm_{perforation}$: 3.7 mm. (Pl. 24/43.3; 43/8). b. 1 hand-carved,

discoidal amber bead, with oblate profiles and cylindrical perforation. L: 8 mm; Dm: 21 mm; $Dm_{perforation}$: 5 mm. (Pl. 24/43.2; 43/2). 7. Fragments of a curved iron *knife* with the handle in middle position (?), situated in horizontal position on the right side of the chest. Judging by its condition before being unearthed, it would have originally been 180 mm long. Dimensions of the blade based on the fragments: W: 25 mm; Th: 14.4 mm. 8. 3 *beads* discovered on the right side of the upper lumbar vertebrae: a. 1 fragmentary preserved, large glass bead of truncated double-conical shape, manufactured by winding. The paste, originally translucent, with olive-green colour, is rendered opaque by the extensive crackling and patination of the surface. L: 7.71 mm; Dm: 27.57 mm; $Dm_{perforation}$: 4.4 mm. (Pl. 24/43.4; 43/1). b. 1 lathe-turned amber bead of asymmetrical truncated conical shape. The perforation is cylindrical, with a worn edge on the upper end. The base and the sides are ornamented with an incised linear decoration. L: 8.48 mm; Dm: 20 mm; $Dm_{perforation}$: 4.5 mm. (Pl. 24/43.5; 43/3). c. 1 lathe-turned amber bead of asymmetrical double-conical shape and cylindrical perforation. The base and the size are decorated with incised lines. L: 9.24 mm; Dm: 18.74–19.27 mm; $Dm_{perforation}$: 5.4–5.95 mm. (Pl. 24/43.6; 43/4). 9. Silver *buckle* above the pelvis, to the right of the spine. The buckle ring is oval; the tongue is semi-circular in section, its rectangular base is decorated with four notches. The oval buckle plate is made of a bent silver plate whose backside is rectangular. The two parts of the plate are held together by a silver rivet. L: 40 mm; $Dm_{buckle\ ring}$: 25 × 23 mm; Th: 4 mm; $Dm_{buckle\ plate}$: 20 × 21 mm; L_{pin}: 25 mm. (Pl. 26/43.7; 42/3). 10. On the sacrum, a silver *buckle* of the same type as the previous one, except that the rectangular base of the tongue is undecorated. L: 39 mm; $Dm_{buckle\ ring}$: 21 × 19 mm; Th: 4 mm; $Dm_{buckle\ plate}$: 20 × 22 mm; L_{pin}: 23 mm. (Pl. 26/43.8; 42/4). 11. Wheel-thrown, disc-shaped, dark grey *spindle-whorl* found near the right forearm. Its upper half is convex, with a slightly projecting, cut base; the lower half is concave at the base. The surface shows traces of wheel throwing. Dm: 43 mm; H: 15 mm; Dm_{hole}: 8 mm. (Pl. 24/43.7; 43/9). 12. In the area of the left forearm and hip massive traces of organic material (wood and leather?) were observed. Objects 12–14 were discovered in this area. 3 *beads* in the central part of the forearm: a. Barrel-shaped mosaic glass bead. The decoration consists of the following elements: a) 4 cross-motifs, formed by 4–4 rectangular checkerboard patterns, superimposed in the centre by a mint-green rectangular escutcheon. The checkerboard patterns consist of cane sections with a rectangular cross section, formed of 4 × 4 fused, white and blue canes. The patterns are stretched, both horizontally and towards the thread-hole ends, appearing striped. The green escutcheons exhibit inlaid, light-yellow decorations depicting four-lobed leaves, positioned diagonally. b) inlayed light-yellow blotched patterns on brick-red base, positioned at the corners of the cross-patterns, one in each quadrant. These are also stretched, towards the thread-hole ends, appearing striped. L: 11.30 mm; Dm: 12.41 mm; $Dm_{perforation}$: 4.21 mm. (Pl. 27/43.6; 43/6). b. Hand-carved amber bead of irregular shape. Initially it was probably cylindrical, now exhibiting wedge-shape wear-related deformation. A considerable segment is missing from one profile. The perforation is cylindrical. L: 4–10.61 mm; Dm: 18.55 mm; $Dm_{perforation}$: 3.87–4.11 mm. (Pl. 27/43.7). c. Discoid hand-carved amber bead with cylindrical perforation. L: 7.52 mm; Dm: 19.6 mm; $Dm_{perforation}$: 4.82–4.98 mm. (Pl. 27/43.8). 13. In the same place small *silver sheet fragments* pierced on the edges. 14. Under the beads, on the outer side of the left forearm, a silver *bracelet*, circular in section, with a spiral-shaped thickening part. It was found in a fragmentary state among the organic remains and was therefore taken out with earth. Dm: 65 mm; Th_{spiral}: 6 mm. (Pl. 27/43.4). 15–16. On each wrist, a silver cast *bracelet* with thickening ends. Both ends are decorated with 5 rows of punched dots, with a 2 mm thick gold plate in a notch between rows 2 and 3. Dm: 65 mm; Th: 3 mm; $Th_{thickened\ end}$: 6 mm. (Pl. 27/43.1–2; 42/5–6). 17. Round glass *bead* discovered on the left iliac crest. It was manufactured by winding and has an opaque, black colour, decorated with two applied interwoven white lines. L: 11.22 mm; Dm: 14.38 mm; $Dm_{perforation}$: 3.7 mm. (Pl. 24/43.8; 43/7). 18. Glass twin *bead* on the outer side of the left femur's upper end. It was manufactured by winding and is composed of two slightly differing flattened globular segments. Both segments share the same decorative pattern: a) an applied, circumferential, brick

red, straight band, positioned on the equatorial axis, minimally protruding from the surface. b) two applied, white zig-zag lines with irregular wavelengths, positioned near the thread-hole ends (occasionally partially overlapping), with a higher, varying degree of protrusion. L: 29.3 mm; Dm: 23.9–25.3 mm; $Dm_{perforation}$: 9.25 mm. (Pl. 27/43.5; 43/5). 19. In the same place, partially underneath the bead, bone *comb* that, judging by the detected leather remains, was kept in a leather purse or beaded pouch hanging from the waist. The handle has been poorly preserved, making it difficult to determine the exact type. Its restored condition and field observations suggest that it had a high and narrow semi-circular handle, its lower half was covered by two narrow and long bone plates, the upper part of which was cut straight. The rivets that hold the lower side plates together are offset from each other above and below, in a row, and were probably arranged in a semi-circle on the handle plate. The lower part of the handle is flanked by a clearly visible double row of rings-and-dots, as well as a larger deducible one, and by further smaller rings-and-dots above the rivets, arranged in one row on the left and two rows on the right. A long bone plate adhered to the serrated part of the decorated side, presumably the remains of a comb case. Similarly to the comb, it was decorated with rings-and-dots. Dimensions: H (including the handle): 50 mm; L: 85 mm; Th: 7.6 mm. (Pl. 27/43.3; 42/7). 20. Oval silver *buckle* with a tongue with semicircular section, discovered on the outer side of the right fibula. $Dm_{buckle\ ring}$: 16 × 14 mm; Th: 3 mm; L_{pin}: 18 mm. (Pl. 26/43.6; 42/10). 21. Oval silver *buckle* with a tongue with semicircular section, discovered on the inner side of the left tibia's upper part. $Dm_{buckle\ ring}$: 17 × 15 mm; Th: 3 mm; L_{pin}: 18 mm. (Pl. 26/43.4; 42/9). 22. Oval silver *buckle* with a tongue with semicircular section, discovered on the outer side of the left ankle bone. $Dm_{buckle\ ring}$: 16 × 14 mm; Th: 3 mm; L_{pin}: 18 mm. (Pl. 26/43.5; 42/8).

Grave 44 (Cx. 125) – Pl. 20
O: W–E (265°); **L**: 1.4 m; **W**: 0.4 m; **D**: -0.17 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill, disturbed by animal burrows. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is elongated-oval, narrowing towards the bottom, the fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 45 (Cx. 126) – Pl. 21–22
O: W–E (275°); **L**: 2.11 m; **W**: 0.82 m; **D**: -0.6 m; **Age**: Infans I (5–6); **Sex**: –.
Grave pit: Elongated oval-shaped shaft grave with stepped side walls, flat bottom, brownish-yellow, clayey fill, disturbed by animal burrows. **Reopening**: The reopening affected the western and middle third of the grave. The reopening pit is elongated-oval, narrowing towards the bottom, the fill is blackish-dark brown and mixed. **Coffin**: On the bottom of the grave, at the western end, the imprint of a (log?) coffin was identified. **Position of the skeleton**: Poorly preserved bones of the right forearm and of the two tibiae were discovered. **Grave goods**: 1. 514 *beads* of various types and materials, found in secondary position, clustered at the western end of the grave: a. 419 round seed beads of opaque, black colour, manufactured by winding. Most of them have short and standard barrel and short pear-shaped sections, but ellipsoid, short truncated biconical, and standard concave shapes also occur. 221 pieces exhibit a thin gold-coloured coating, in various states of preservation. L: 1.5–3 mm; Dm: 2.5–4 mm; $Dm_{perforation}$: 1–1.8 mm. (Pl. 22/45.1; 44/1). b. 3 round, opaque, brick-red seed beads, with different sections (circular, short barrel-shaped, oblate), manufactured by drawing. L: 2.5–3.5 mm; Dm: 3.5–4 mm; $Dm_{perforation}$: 1 mm. (Pl. 22/45.1; 44/1). c. 55 round, opaque, jade-green seed beads, manufactured by drawing: 43 single-, 11 double-, and 1 triple-segmented. L: 1.5–2 mm; Dm: 2–3 mm; $Dm_{perforation}$: 1 mm (single-segments); L: 4–6 mm; Dm: 2.5–3 mm; $Dm_{perforation}$: 1 mm (double-segments); L: 7.5 mm; Dm: 2 mm; $Dm_{perforation}$: 1 mm (triple-segment). (Pl. 22/45.1; 44/1). d. 1 round, translucent, cobalt-blue glass seed bead, manufactured by drawing.

L: 2.5–3.5 mm; Dm: 3.5–4 mm; $Dm_{perforation}$: 1 mm. (Pl. 22/45.1; 44/1). e. 7 cylindrical beads, manufactured of opaque, brick-red glass, by drawing. They originate from at least 2 different glass canes, based on the spectrum of their diameter. L: 5–8 mm; Dm: 2.5–3.5 mm; $Dm_{perforation}$: 0.8–2 mm. (Pl. 22/45.1; 44/1). f. 12 cylindrical beads of opaque, green colour, manufactured by drawing. According to the diameter, they originate from more than one glass cane. L: 5–8 mm; Dm: 2.5–3.5 mm; $Dm_{perforation}$: 1–2.5 mm. (Pl. 22/45.1; 44/1). g. 4 fragmentary cylindrical glass beads of cobalt-blue colour, manufactured by drawing. L: 4–5 mm; Dm: 3 mm; $Dm_{perforation}$: 1 mm. (Pl. 22/45.1; Pl. 44/1). h. 1 translucent, cobalt-blue glass bead of flattened globular shape, manufactured by winding. L: 5.5 mm; Dm: 8 mm; $Dm_{perforation}$: 2.3–2.57 mm. (Pl. 21/45.6). i. 1 pear-shaped glass bead of dark maroon colour (appearing almost black), manufactured by winding. L: 9.5 mm; Dm: 9.27 mm; $Dm_{perforation}$: 1.43–3 mm. (Pl. 21/45.7). j. 1 partially preserved glass bead, manufactured by winding. It has a doughnut-shape, and a semi-translucent, dark-maroon colour (appearing almost black). L: 0.5 mm; Dm: N.D.; $Dm_{perforation}$: 3.5 mm. (Pl. 21/45.4). k. 2 tubular bead fragments manufactured of metal wire with a triangular section. Thread-remnants could be observed in their thread-hole, their material is yet to be determined. L: 4.5 / 9 mm; Dm: 2 mm; $Dm_{perforation}$: 1 mm; Weight: 0.11 / 0.33 g. (Pl. 22/45.2–3). l. 5 intact and 1 partially preserved sheet metal beads, manufactured by folding. Two specimens have a polyhedral shape, the others have different profiles (mostly faceted cylindrical), with irregularly placed and less carefully executed facets. L: 2.4–3.2 mm; Dm: 2.59–3.10 mm; $Dm_{perforation}$: 1.2–1.42 mm; Weight: 0.04–0.07 g. (Pl. 22/45.1; 44/1). m. 1 spherical object of indeterminate material and highly corroded surface. It has a round, slightly flattened globular shape. L: 10 mm; Dm: 11 mm; $Dm_{perforation}$: 1 mm. (Pl. 21/45.3). n. 1 partially preserved bead, made of bone. Hand-carved, abraded. It has a discoid shape, with barrel shaped section. The perforation is conical, with a slightly oval cross-section, drilled from the upper end. L: 6 mm; Dm: N.D.; $Dm_{perforation}$: 2–2.5 mm. (Pl. 21/45.5). 2. Fragments of a silver *ring* with undecorated surface, in the fill. Approximately half of it is missing. Dm: approx. 16 mm; W: 8 mm; Th: 1 mm. (Pl. 21/45.2). 3. Small *iron fragment* recovered from the fill. (Pl. 21/45.8).

Grave 46 (Cx. 127) Pl. 28–29
O: W–E (269°); **L**: 2.59 m; **W**: 0.68 m; **D**: -0.57 m; **Age**: Adultus (>23); **Sex**: –.
Grave pit: Irregularly shaped grave with rounded corners on the western side and curved east end, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the middle of the grave. The reopening pit is irregular in shape, its bottom gradually deepening towards the pit's west side; the fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: In the fill of the reopening pit fragments of a skull were found in secondary position. In the eastern part of the grave, the tibiae and fibulae were in anatomical position. **Grave goods**: 1. Copper-alloy *buckle* below the left knee. The oval-shaped, cast buckle ring is semi-circular in section; the rectangular base of the tongue with semi-circular section is decorated with three notches. A kidney-shaped amber inlay is set in the central openwork of the oval buckle plate. The end of the buckle plate is bent, the backside has a rectangular shape and has three rivets at the edge. $Dm_{buckle\ ring}$: 20 × 14 mm; Th: 6 mm; $Dm_{buckle\ plate}$: 18 × 15 mm; L_{pin}: 16 mm. (Pl. 28/46.2; 43/12). 2. *Buckle* similar to the previous one, found in secondary position, at the eastern end of the grave. The inlay is missing. $Dm_{buckle\ ring}$: 19 × 13 mm; Th: 6 mm; $Dm_{buckle\ plate}$: 18 × 15 mm; L_{pin}: 16 mm. (Pl. 28/46.3; 43/13). 3. Small oval silver *buckle* with a tongue with semicircular section, found in secondary position. Part of the buckle ring is missing. Dm: 16 × 17 mm; Th: 3 mm; L_{pin}: 16 mm. (Pl. 28/46.8). 4. Heavily corroded fragment of an oval iron *buckle* in secondary position. Half of the buckle ring and the pin are missing. Dm: 20 × 27 mm; Th: 11 mm. (Pl. 28/46.7). 5. Fragmentary bone *comb* discovered in the eastern part of the grave, at the end of the deceased's leg, along with iron remains. The handle is narrow and low, the side plates are narrow and undecorated. The bronze rivets holding the plates together are arranged in a triangular pattern on each side of the side plates, and an additional rivet is

visible in the centre, as well as on the handle. H: 61 mm; L: 116 mm; Th: 12 mm. (Pl. 29/46.1). 6. At the eastern end of the grave several *iron fragments* of different dimensions that originally probably belonged to more than one object. Blade fragments suggest the presence of a knife. (Pl. 28/46.4–5). 7. Oval iron *buckle* with circular section, discovered in the same place as the iron fragments. A textile imprint can be observed on part of the buckle and the pin. Dm: 36 × 31 mm; Th: 8 mm; L_{pin}: 31 mm. (Pl. 28/46.6).

Grave 47 (Cx. 128) – Pl. 29–30
O: W–E (259°); **L**: 1.65 m; **W**: 0.64 m; **D**: -0.52 m; **Age**: –; **Sex**: –.
Grave pit: Grave pit in the shape of an irregular rectangle with rounded corners on the west side and a curved eastern end, with presumably stepped side walls (slightly over-excavated), flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is elongated-oval, its wall slightly narrowing towards the bottom, the base is flat; the fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: Impressions of poorly preserved human bones and teeth were found in secondary position on the bottom of the grave. **Grave goods**: 1. Ceramic *vessel* discovered in the southwest corner of the grave, presumably on a step, in a fragmentary and incomplete state, broken in several pieces. Fragments of base and wall of a ceramic vessel thrown on the fast wheel, made of well-levigated, fine fabric, reduction-fired, grey-coloured, with matte surface. The exact shape of the vessel cannot be reconstructed. Dm_{base}: 64 mm. (Pl. 29/47.2). 2. 370 *beads* found in secondary position, clustered mainly in the central area and the western half of the grave: a. 346 opaque, black glass seed beads, manufactured by winding. All have round shapes (with the exception of a slightly almond-shaped specimen), with various sections (circular, short and standard barrel, short and standard pear-shapes). All of them exhibit traces of a thin gold-coloured coating on their surface (including the interior of the thread-hole, in some instances) in various states of preservation. L: 2.29–2.92 mm; Dm: 2.67–2.78 mm; $Dm_{perforation}$: 0.95–1.25 mm. (Pl. 30/47.1; 45/1). b. 21 opaque, mint-green glass seed beads, manufactured by drawing: 19 single- and 2 double-segmented. All are round shaped, with multiple variations regarding the profile of the individual segments. L: 1.8–2 mm; Dm: 2–3.14 mm; $Dm_{perforation}$: 1.2 mm (single-segments); L: 3.97–4.36 mm; Dm: 2.5–3.12 mm; $Dm_{perforation}$: 0.82–1.2 mm (double-segments). (Pl. 30/47.1; 45/1). c. 1 fragmentary preserved, cylindrical glass bead of translucent, cobalt-blue colour, manufactured by drawing. L: N.D.; Dm: 2.86 mm; $Dm_{perforation}$: 1.47 mm. d. 2 sheet metal beads, manufactured by folding. One is polyhedral, the other has an irregular, faceted cylindrical shape, with irregularly placed and less carefully executed facets. L: 2.7 / 3.2 mm; Dm: 2.65 / 3.10 mm; $Dm_{perforation}$: 1.4 / 1.71 mm; Weight: 0.06 / 0.07 g. (Pl. 30/47.1; 45/1). 3. Small *iron fragment* found on the bottom of the grave, in the central area. (Pl. 29/47.3).

Grave 48 (Cx. 129) – Pl. 31–32
O: W–E (269°); **L**: 2.4 m; **W**: 0.82 m; **D**: -0.53 m; **Age**: Senilis (>60); **Sex**: Male.
Grave pit: Rectangular grave with rounded corners, stepped side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening extended on the central and western third of the grave. The reopening pit is elongated-oval, its walls narrow slightly towards the bottom, the base is uneven. The fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: In the western part of the reopening pit, fragments of the skull and other human bones were found in secondary position, in a pile. In the eastern part of the grave, the tibiae and fibulae lay in anatomical position. **Grave goods**: 1. Egg-shaped ceramic *vessel* found in the southwest corner of the grave, presumably on a step, broken in several pieces that could be joined together. It was hand-built and hand-wheeled subsequently, made of coarse fabric, tempered with sand and crushed pebbles. It was fired in oxidizing atmosphere and has a brick-red colour. The vessel has a slightly everted, rounded rim and a narrow neck; the sides grow narrow towards the bottom of the pot. The bottom is slightly concave

with an irregularly shaped decoration running around it, impressed possibly by a finger or an object with a curved surface. Dm_{rim}: 112 mm; H: 140 mm; Dm_{base}: 77 mm. (Pl. 32/48.1; 47/1). 2. In the north-west corner of the grave, probably placed on a step, a poorly preserved, heavily corroded iron *spearhead* with closed socket. For lack of an iron core the object did not survive the restoration process. L: approx. 350 mm (based on field observations). 3. Small *buckle* in the middle third of the grave. The buckle ring, most probably made of bone, is D-shaped; the copper-alloy tongue is semi-circular in section. At the base of the pin, two oxidised metal fragments show textile residues. Based on field observations, it was probably fitted with an iron buckle plate. Dm: 19 × 21 mm; Th: 5 mm; L_{pin}: 23 mm. (Pl. 31/48.2). 4. Small *buckle* next to the previous one. The buckle ring is fragmentary and is probably made of bone; the copper-alloy tongue is semi-circular in section. $Dm_{buckle\ ring}$: 30 × 21 mm; Th: 7 mm; L_{pin}: 23 mm. (Pl. 31/48.3). 5. Hand-carved amber *bead* found near the north-western wall of the grave. It has a conical shape with convex sides, and a rounded top. The perforation is cylindrical, on one end is slightly funnel shaped. One side of the base is severely worn. L: 20.68 mm; Dm: 45.24 mm; $Dm_{perforation}$: 6.31–7.52 mm. (Pl. 32/48.2; 44/3). 6. Small *iron fragment* discovered in the fill, in the north-west area. (Pl. 31/48.5).

Grave 49 (Cx. 130) – Pl. 32
O: WSW–ENE (256°); **L**: 1.77 m; **W**: 0.56 m; **D**: -0.56 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical longitudinal and eastern side walls, stepped western wall, flat bottom, and brownish-yellow, clayey fill, cut through by animal burrows. **Reopening**: The reopening affected almost the entire grave. The reopening pit is oblong-oval, with perpendicular walls, slightly flaring on the eastern side, the bottom is flat, the fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: Human bones were found in secondary position, in a pile at the western end of the grave. **Grave goods**: 1. 137 glass *beads* of various types, found in secondary position, at the western end of the grave, among the disturbed skeletal remains: a. 95 opaque, black glass seed beads, manufactured by winding. All have round shapes, with several variations (circular, short and standard barrel, short and standard pear-shapes) regarding their section and exhibit a thin gold-coloured coating in various states of preservation. L: 1.65–3.02 mm; Dm: 2.65–4.13 mm; $Dm_{perforation}$: 1.1–1.88 mm. (Pl. 32/49.2; 44/2). b. 25 seed beads similar to the previous items with the difference that they have a brighter yellow hue, with a porous paste, exhibiting more accentuated decay, cracked, sugary surfaces. In some instances, the surface loss uncovered a brownish-yellow layer underneath; in other cases, the section of the fractured surfaces appears homogenous. L: 2.04–2.15 mm; Dm: 2.48–3 mm; $Dm_{perforation}$: 1.24–1.88 mm. (Pl. 32/49.2; 44/2). c. 14 translucent, mint-green glass seed beads, manufactured by drawing: 13 single- and 1 double-segmented. The formers are round, the latter is undulating-cylindrical. L: 1.95–3 mm; Dm: 2.65–3.1 mm; $Dm_{perforation}$: 0.99–1.14 mm (single-segments); L: 2.82; Dm: 2.64 mm; $Dm_{perforation}$: 0.99 mm (double-segment). (Pl. 32/49.2; 44/2). d. 1 semi-translucent, jade-green glass bead of cylindrical shape, manufactured by drawing. L: 4.93 mm; Dm: 2.81 mm; $Dm_{perforation}$: 0.99 mm. (Pl. 32/49.2; 44/2). e. 1 fragmentary double-segmented glass bead of translucent, cobalt-blue colour, manufactured by drawing. L: 4.6 mm; Dm: 2.64 mm; $Dm_{perforation}$: 1.44 mm. (Pl. 32/49.2; 44/2). f. 1 asymmetrical short-pear shaped glass bead, manufactured by winding. The upper end is tilted; the perforation is intersected by a deep toolmark, with rounded edges. The latter deformed the decoration as well, which consists of an applied white ring, slightly above the equatorial line, indicating a perhaps botched removal of the already decorated, but still viscous item from the mandrel. L: 4.93 mm; Dm: 2.81 mm; $Dm_{perforation}$: 0.99 mm. (Pl. 32/49.2; 44/2).

Grave 50 (Cx. 131) – Pl. 33
O: W–E (264°); **L**: 1.91 m; **W**: 0.95 m; **D**: -0.95 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical longitudinal walls and stepped western wall. The

bottom is flat and is cut through by animal burrows. The fill consists of brownish-yellow, clayey soil. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is oval, its western side wall deepens gradually, the east side narrows towards the bottom, the base is uneven, and the fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: Human bone fragments were found in the reopening pit. **Grave goods**: –.

Grave 51 (Cx. 132) – Pl. 34
O: W–E (270°); **L**: 1.82 m; **W**: 0.67 m; **D**: -0.56 m; **Age**: Infans I (2–3); **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom, cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is elongated-oval, deepening towards west, the bottom is flat and the fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: A few teeth were recovered from the western part of the reopening pit. **Grave goods**: 1. Small, oval silver *buckle* with a tongue with semicircular section, discovered at the eastern end of the grave, in secondary position. $Dm_{buckle\ ring}$: 16 × 15 mm; Th: 4 mm; L_{pin}: 17 mm. (Pl. 34/51.2).

Grave 52 (Cx. 133) – Pl. 33
O: W–E (267°); **L**: 1.23 m; **W**: 0.74 m; **D**: -0.37 m; **Age**: –; **Sex**: –.
Grave pit: Oval grave with vertical side walls, flat bottom cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is oval and narrows towards the bottom, the fill is blackish-dark brown. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 53 (Cx. 134) – Pl. 34
O: W–E (263°); **L**: 2.35 m; **W**: 0.58 m; **D**: -0.52 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western third of the grave. The reopening pit is oval, narrowing towards the bottom; the fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: Poorly preserved bones of human lower limbs, presumably in anatomical position, were discovered in the eastern end of the grave. **Grave goods**: 1. Bottom of a ceramic *vessel* recovered from the fill of the grave, found in secondary position. It was thrown on the fast wheel, made of well-levigated, fine fabric, and two-stage reduction-fired. The fracture surface is light greyish brick-red; the surface is dark grey, matte and burnished. The shape of the vessel is unknown. Dm_{base}: 73 mm. (Pl. 34/53.4). 2. Heavily corroded fragments of an oval iron *buckle* found in the fill. Dm: 38 × 30 mm; Th: 7 mm. (Pl. 34/53.3). 3. Four fragments of the blade and handle (?) of an iron *knife* from the fill of the reopening pit. W_{blade}: 18 mm; Th: 5 mm. (Pl. 34/53.2).

Grave 54 (Cx. 135) – Pl. 35
O: W–E (277°); **L**: 2.67 m; **W**: 0.79 m; **D**: -0.7 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, uneven bottom cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the central and eastern third of the grave. The reopening pit is oval, its sides slightly flaring, and the bottom uneven. The fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Ceramic *jug* (?) found in the southwest corner of the grave, placed on a step, in fragmentary, friable condition, broken in several pieces. It was thrown on the fast wheel, made of well-levigated, fine fabric, and two-stage reduction fired. The blackish-dark grey surface is matte and burnished, while the core has a brick red colour. The ceramic vessel is extremely poorly preserved, friable (porous), collapsed under the pressure of the soil, and could not

be reassembled. The exact shape is unknown, presumably a jug. 2. Egg-shaped ceramic *vessel* found in the mouth of the jug, in fragmentary, but assemblable state. It was hand-built and hand-wheeled subsequently, made of coarse fabric, tempered with sand and crushed pebbles, oxidation-fired, and then reduced to a dark grey colour, brownish-brick, red in places. The asymmetrically rounded rim is slightly curved, the neck is narrow and cylindrical, the shoulder arched, the sides grow narrow towards the bottom of the vessel, the bottom is slightly concave. Dm_{rim}: 74 mm; H: 88 mm; Dm_{base}: 52 mm. (Pl. 35/54.3, 47/2). 3. The ceramic jug contained fragments of a glass *beaker*, the shape of which only became recognisable after restoration. It is made of free-blown, transparent, yellowish olive-coloured glass. The fire-rounded rim is slightly everted, decorated underneath with thin glass threads running in a spiral. The surface of the tall and slender conical body is decorated with a wavy-lined glass thread. It is provided with a disc-shaped base. H: 176 mm; Dm_{rim}: 83.5 mm; Dm_{base}: 30.5 mm; Th: 3.3 mm. (Pl. 35/54.2; 47/7). 4. In the north-western part of the grave, only a fragmentary imprint left in the soil by a badly deteriorated *comb* has been preserved. It was conserved together with the excavated clod. Its shape is most similar to the specimen from grave 1, but this one is larger and there is a seemingly semi-circular dent at the base of the handle on either side of the side plates. The side plates are held together by aligned bronze rivets. H: 87 mm, L: 11 mm. 5. In the north-western half of the burial pit, close to the comb, a large iron *knife* blade and four fragments of the blade, which make it possible to determine the width and thickness. W: 20 mm; Th: 5 mm. (Pl. 35/54.6). 6. Spherical, opaque, brick-red glass *bead*, in the proximity of the knife, manufactured by folding (?). L: 5.84 mm; Dm: 7.26 mm; $Dm_{perforation}$: 2.3 mm. (Pl. 35/54.5). 7. East from the knife a small *iron fragment* in secondary position. (Pl. 35/54.4).

Grave 55 (Cx. 136) – Pl. 33
O: W–E (270°); **L**: 1.45 m; **W**: 0.63 m; **D**: -0.45 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, uneven bottom, cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western and central third of the grave. The reopening pit is oval, with vertical walls, uneven bottom, and blackish-dark brown fill. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 56 (Cx. 137) – Pl. 36
O: W–E (271°); **L**: 1.98 m; **W**: 0.38 m; **D**: -0.16 m; **Age**: Adultus (?); **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is oblong-oval, narrowing towards the bottom. The fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: Fragments of poorly preserved long bones were found in secondary position on the bottom of the grave. **Grave goods**: –.

Grave 57 (Cx. 139) – Pl. 36
O: W–E (264°); **L**: 2.6 m; **W**: **0.**62 m; **D**: -0.65 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening extended to the western and middle third of the grave. The reopening pit is oblong-oval, narrowing towards the bottom, the bottom is uneven. The fill is blackish-dark brown and mixed. **Coffin**: On the bottom of the grave the imprint of a log coffin was identified. **Position of the skeleton**: Fragments of poorly preserved human bones were found on the bottom of the grave. **Grave goods**: 1. 4 fragments of a small iron *knife* blade in secondary position. W: 13 mm; Th: 5 mm. (Pl. 36/57.2). 2. Two *flints* in secondary position. (Pl. 36/57.3–4).

Grave 58 (Cx. 140) – Pl. 36
O: W–E (274°); **L**: 1.56 m; **W**: 0.6 m; **D**: -0.4 m; **Age**: –; **Sex**: –.

Grave pit: Elongated-oval grave with vertical side walls, flat bottom, cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is rectangular with rounded corners, its western side is stepped, the eastern one slightly splay, the bottom deepens gradually towards west. The fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 59 (Cx. 141) – Pl. 37
O: W–E (273°); **L**: 2.57 m; **W**: 0.68 m; **D**: -0.45 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, stepped side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the western and middle third of the grave. The reopening pit is elongated-oval, narrowing towards the bottom, and has an uneven base. The fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: Fragments of poorly preserved human bones and teeth were found in the fill. **Grave goods**: 1. Heavily corroded, small oval iron *buckle* in the fill. The buckle ring is oval with circular section; the tongue is semi-circular in section. Dm: 24 × 18 mm; Th: 7 mm. (Pl. 37/59.3). 2. Several iron fragments were discovered in the grave fill, two of which probably belonged to an iron *knife*. L: 39 mm; W: 18 mm; Th: 5 mm. (Pl. 37/59.8). 3. Fragment of a *firesteel* in secondary position. L: 67.3 mm; W: 23.7 mm; Th: 0.54 mm. (Pl. 37/59.6). 4. Elongated, corroded iron object flattened at one end, found in the fill of the grave. The cross-section is circular. Its function is uncertain, presumably *arrowhead*. L: 80 mm; Dm: 5.4 mm; W: 13.7 mm. (Pl. 37/59.2). 5. *Iron fragments* of different sizes. (Pl. 37/59.4, 5, 7).

Grave 60 (Cx. 142) – Pl. 37
O: W–E (282°); **L**: 1.96 m; **W**: 0.77 m; **D**: -0.47 m; **Age**: –; **Sex**: –.
Grave pit: Oblong-oval grave with vertical side walls, flat bottom, cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the almost entire surface of the grave. The reopening pit is elongated-oval in shape, narrowing towards the bottom, the base is uneven. The fill is blackish-dark brown and mixed, and contained three fragmentary loom weights. **Coffin**: –. **Position of the skeleton**: Three human teeth were found in the fill. **Grave goods**: –.

Grave 61 (Cx. 143) – Pl. 38
O: W–E (266°); **L**: 1.63 m; **W**: 0.69 m; **D**: -0.52 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the almost entire surface of the grave. The reopening pit is oblong-oval, narrowing towards the bottom, the base is uneven. The fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: Human teeth were recovered from the fill. **Grave goods**: 1. Two small *iron fragments* recovered from the fill. (Pl. 38/61.2–3).

Grave 62 (Cx. 144) – Pl. 39
O: W–E (283°); **L**: 1.7 m; **W**: 0.56 m; **D**: -0.47 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, and brownish-yellow, clayey fill. **Reopening**: The reopening extended to the central and eastern third of the grave. The reopening pit is oblong-oval, narrowing towards the bottom, the base is uneven. The fill is blackish-dark brown and mixed. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Globular ceramic *vessel* found in several pieces, in the fill of the grave. It is hand-built, made of coarse fabric, tempered with sand and crushed pebbles, reduction-fired. It has brownish-dark grey colour, with patches. The vessel has an asymmetrically rounded, everted rim, narrow and cylindrical neck, curved shoulder and globular body. The base is missing and was completed during restoration. Dm_{rim}: 92 mm; H: 116 mm. (Pl. 39/62.2).

Grave 63 (Cx. 146) – Pl. 38
O: W–E (270°); **L**: 2.32 m; **W**: 0.6 m; **D**: -0.38 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, stepped side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the western and central third of the grave. The reopening pit is oblong-oval, narrowing towards the bottom, the base is uneven. The fill is blackish-dark brown and mixed. **Coffin**: The impression of a log coffin was identified along almost the entire length of the grave's bottom, being interrupted in the middle. **Position of the skeleton**: Human tibiae were discovered on the bottom of the grave, at the eastern end, presumably in anatomical position. **Grave goods**: 1. Fragment of an oval silver *buckle* in the south-western part of the grave, in the fill. The tongue is missing. L: 16 mm; W: 10 mm; Th: 4 mm. (Pl. 38/63.4). 2. Heavily corroded oval iron *buckle* with a tongue with semi-circular section, found in the western part of the grave, next to the southern wall. $Dm_{buckle\ ring}$: 41 × 34 mm; Th: 10 mm; L_{pin}: 33 mm. (Pl. 38/63.2). 3. Fragmentary silver *buckle* in the central part of the grave, in secondary position. The buckle ring is kidney-shaped and has a tongue with semi-circular section. The rectangular base of the tongue is decorated with two notched lines. A part of the buckle ring is missing. Dm: 20 × 16 mm; Th: 3 mm; L_{pin}: 18 mm. (Pl. 38/63.3). 4. Small oval silver *buckle* found on the outer side of the right tibia's lower end. The rectangular base of the tongue with semi-circular section is undecorated. Dm: 20 × 14 mm; Th: 3 mm; L_{pin}: 16 mm. (Pl. 38/63.5). 5. Small oval silver *buckle* with a tongue with semi-circular section, whose rectangular base is undecorated. Found in the vicinity of the previous buckle, to the north-east. Dm: 18 × 13 mm; Th: 3 mm; L_{pin}: 16 mm. (Pl. 38/63.6). 6. Fragment of a fire-rounded rim, presumably part of a *beaker*, made of transparent, yellowish olive-coloured glass. It was discovered in the grave fill. H: 10 mm; W: 24.5 mm; Th: 3 mm. (Pl. 38/63.7).

Grave 64 (Cx. 147) – Pl. 39
O: W–E (273°); **L**: 2.42 m; **W**: 0.81 m; **D**: -0.49 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the almost entire surface of the grave. The reopening pit is oblong-oval, deepening towards west. The fill is blackish-dark brown and mixed. **Coffin**: On the bottom of the grave, in the eastern part, the impression of a log coffin was identified. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 65 (Cx. 148) – Pl. 40
O: W–E (278°); **L**: 1.57 m; **W**: 0.48 m; **D**: -0.23 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the almost entire surface of the grave. The reopening pit is oblong-oval, slightly narrowing towards the bottom; the base is flat. The fill is blackish-dark brown and mixed with brownish-yellow clayey soil. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 66 (Cx. 149) – Pl. 39
O: WNW–ENE (297°); **L**: 2.12 m; **W**: 0.7 m; **D**: -0.18 m; **Age**: –; **Sex**: –.
Grave pit: Elongated-oval grave with vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is oblong-oval, narrowing towards the bottom; the base is flat. The fill is blackish-dark brown, mixed with brownish-yellow clayey soil. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Lathe-turned amber *bead*, recovered at the identification level of the grave, near the south-eastern corner. It has a conical shape with convex sides, and a rounded top. The perforation is off-centre, drilled from both ends. It is decorated with incised circular lines. L: 9.82 mm; Dm: 22.12 mm; $Dm_{perforation}$: 7mm. (Pl. 39/66.2; 45/3).

Grave 67 (Cx. 150) – Pl. 40
O: SW–NE (233°); **L**: 1.8 m; **W**: 0.57 m; **D**: -0.42 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom, cut through by animal burrows, and brownish-yellow, clayey fill. **Reopening**: The reopening covered the entire surface of the grave. The reopening pit is oblong-oval, narrowing towards the bottom, the base is flat. The fill is blackish-dark brown, mixed with brownish-yellow clayey soil. **Coffin**: –. **Position of the skeleton**: No human bones were discovered. **Grave goods**: –.

Grave 68 (Cx. 151) – Pl. 41
O: W–E (277°); **L**: 1.82 m; **W**: 0.75 m; **D**: -0.66 m; **Age**: –; **Sex**: –.
Grave pit: Oblong-oval grave with stepped side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the almost entire surface of the grave. The reopening pit is rectangular with rounded corners, narrowing towards the bottom, the base is uneven. The fill is blackish-dark brown, heavily mixed with brownish-yellow clayey soil. **Coffin**: At the bottom of the grave, a well-preserved imprint of a log coffin was discovered. **Position of the skeleton**: No human bones were discovered. **Grave goods**: 1. Murga type *jug* recovered from the fill of the grave, in fragmentary and incomplete state. It was thrown on the fast wheel, made of well-levigated, fine fabric, fired in reducing atmosphere. The dark grey surface is matte and burnished, the fracture surface has light grey colour. Its thickening rim is everted, with a simple rib at the base of the neck. Dm_{rim}: 120 mm. (Pl. 41/68.5–6). 2. Ceramic *bowl* recovered from the fill of the grave, in intact condition. Hand-built, brownish-grey ceramic bowl, hand-wheeled subsequently, made of coarse fabric, tempered with sand and crushed pebbles and fired in reducing atmosphere. The rim is rounded, the body is hemispherical in shape. Dm_{rim}: 169 mm; H: 73 mm; Dm_{base}: 72 mm. (Pl. 41/68.4; 47/6). 3. In the centre of the grave, on the remains of a log coffin, a fragment of the lower half of a bone *comb* was found, on which two bronze rivets have been preserved. H: 17 mm; L: 18 mm; Th: 6 mm. (Pl. 41/68.2). 4. Flattened globular glass *bead*, manufactured by winding, found in secondary position, in the fill of the reopening pit. It has an opaque, brick-red colour and a polished surface, and is decorated with an inlaid spiral trail, made of a cold-bundled (?) glass-cane, consisting of white and blue individual canes. L: 6.65 mm; Dm: 7.55 mm; $Dm_{perforation}$: 2.70 mm. (Pl. 41/68.3).

Grave 69 (Cx. 152) – Pl. 40
O: W–E (265°); **L**: 2.58 m; **W**: 0.64 m; **D**: -0.7 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, stepped side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the almost entire surface of the grave. The opening pit is elongated-oval with slightly concave sides and flat bottom. The fill is blackish-dark brown, heavily mixed with brownish-yellow clayey soil. **Coffin**: At the bottom of the grave, a well-preserved imprint of a log coffin was discovered. **Position of the skeleton**: In the western end of the grave, in the fill, human bones and skull fragments were piled up. **Grave goods**: –.

Grave 70 (Cx. 153) – Pl. 41
O: W–E (277°); **L**: 1.86 m; **W**: 0.58 m; **D**: -0.38 m; **Age**: –; **Sex**: –.
Grave pit: Rectangular grave with rounded corners, vertical side walls, flat bottom and brownish-yellow, clayey fill. **Reopening**: The reopening affected the almost entire surface of the grave. The reopening pit is oblong-oval, deepening towards east, its bottom is uneven. The fill is blackish-dark brown, mixed in places with brownish-yellow clayey soil. **Coffin**: The imprint of a log coffin was identified at the bottom of the grave, with a part of its side wall preserved on the northern side. **Position of the skeleton**: A few teeth were discovered in the fill. **Grave goods**: –.

III. ANTHROPOLOGICAL ANALYSIS

Szilárd Sándor Gál

The skeletal material from site 7 is in poor condition, the reopening of graves and soil acidity have destroyed 80% of the human bones, and it is only the imprint of human skeletons that has been preserved in most cases. The processing of skeletal material followed macromorphological methods: gender determination (Éry et al. 1963; Mays 2001), age estimation (Nemeskéri et al. 1960; Stloukál – Hanáková 1978; Mays 2001), stature estimation (Sjøvold 1990; Bernert 2008), identification of pathological and epigenetic cases (Ortner 2003; Hauser – de Stefano 1989) and dentition analysis (Brook et al. 1999; Budai 2007; Gál et al. 2018).

Catalogue of the graves with skeletal material

Grave 9

Human skeleton almost entirely destroyed. Only one tooth, a deciduous molar (deciduis molares – DM) from the socket of the mandible or maxilla has survived.

Age estimation: The stage of tooth eruption indicates the age of a child, Infans I (1–7 years).

Gender determination: not possible.

Grave 10

Human skeleton almost entirely destroyed by the acidity of the soil and the reopening of the grave. Small fragments of the skull, portions of the mandible, a few teeth (M1 from 1/2, an incisor from 1/2 and a fragment of another molar with uncertain position) and the impression of the skullcap have been recovered. An incisor (probably from the mandible) has also been retrieved, its crown is worn down.

Age estimation: the teeth are slightly worn, although M1 wears fastest. The individual died at a young age, Iuvenis (15–25 years). Unfortunately, no precise signs of age have been preserved.

Gender determination: not possible.

Grave 11

Human skeleton almost entirely destroyed by soil acidity. The deceased's mandible (Fig. 6), mandible impression and some teeth have been preserved: teeth were recovered from the alveolus.

Age estimation: The stage of tooth eruption indicates the age of a child, Infans I (5–7 years).

Gender determination: not possible.

D.	S.
	DC
D.	**S.**
DM2, DM1, DC, DI	DI2, DC, DM1, DM2

Table 1. Grave 11, dental formula (following Brook et al. 1999).

Fig. 6. Grave 11, frontal view of the mandible.

Grave 12
Human skeleton almost entirely destroyed by soil acidity. Fragments of soil with impressions of the long bones have been preserved.
Age estimation: the size of the long bones indicates the age of an adult (>23).
Gender determination: not possible.

Grave 16
Human skeleton completely destroyed. Only small fragments of dentition have survived, but the poor condition of the teeth prevents analysis of the human remains.
Age estimation: possibly child (Infans I?).
Gender determination: not possible.

Grave 17
Human skeleton almost entirely destroyed by soil acidity. A few teeth have been recovered: a deciduous molar (DM – heavily worn) and a permanent molar (M1 from the alveolus).
Age estimation: the stage of tooth eruption indicates the age of a young child, Infans I (4–5 years).
Gender determination: not possible.

Grave 18
Human skeleton almost entirely destroyed by soil acidity and the reopening of the grave. A few teeth have been preserved: I1 (1/2), C (1), C (2), C (3/4), PM2 (1/2).
Age estimation: the condition of the teeth indicates the age of a young adult individual (Adultus, between 20–30).
Gender determination: not possible.

Grave 19
Human skeleton almost entirely destroyed by soil acidity. A premolar from the alveolus (from the jaw) has been preserved.
Age estimation: the stage of tooth eruption indicates the age of a child (Infans I?).
Gender determination: not possible.

Grave 23
Human skeleton almost entirely destroyed by soil acidity. Small fragments of long bone impressions and a few teeth have been preserved.
Age estimation: the stage of tooth eruption indicates the age of a young child, Infans I (3–6 years).
Gender determination: not possible.

D	S
DM2, DM1, DC, DI2, DI1	DI1, DI2, DC, DM1, DM2 (PM1 and PM2 in the alveolus)
D	S
-	-

Table 2. Grave 23, dental formula: 2102.

Grave 25

Human skeleton almost entirely destroyed by the acidity of the soil and the reopening of the grave. Small fragments of the long bones' impression, small pieces of the long bones' diaphysis and the skull in small fragments have been preserved. The individual's teeth were recovered *in situ*: dental scheme: 2123.

Age estimation: the size of the long bones (the cortical layer is 3–4 mm thick) indicates the age of an adult (Adultus, >40 years).

Gender determination: the shape and feature of the jaw indicate a male.

Pathology: caries and abscess (M2 of the 3rd quadrant).

D.	S.
-	C
D.	S.
M2, PM2, PM1, C, I2, I1	I1, I2, C, PM1, PM2, M2, M3

Table 3. Grave 25, dental formula: 2123.

Grave 26

Human skeleton almost entirely destroyed by soil acidity. Fragments of the lower limbs' diaphysis (femur and tibia, with the cortical layer varying between 3–5 mm) and a single tooth (a portion of an incisor crown) have been preserved.

Age estimation: adult (Adultus, >23 years).

Gender determination: the massive femur suggests a male, but the lack of decisive signs (pelvis and skull) hinders precise determination (male?).

Grave 28

Human skeleton almost entirely destroyed by soil acidity. A few teeth have been preserved: two canines and a premolar from the jaw. A small portion of the postcranial skeleton has been recovered: the impression of the iliac bone, some pieces of the long bones' diaphysis (a fragment of a humerus with a 2–3 mm wide cortical layer).

Age estimation: adult (Adultus, >23 years).

Gender determination: not possible.

Grave 30

Human skeleton almost entirely destroyed by soil acidity, some teeth have been recovered from the alveolus: C, PM1, PM2 (3/4), M1 (3/4).

Age estimation: the stage of tooth eruption indicates the age of a child, Infans II (10–12 years).

Gender determination: not possible.

Grave 31

Human skeleton almost entirely destroyed by soil acidity. Only teeth have been preserved: C (1/2), M1, M2 (1 and 2), M1 (3 and 4), M2. The teeth were in the alveolus at the time of death.

Age estimation: the stage of tooth eruption indicates the age of a child, Infans I-II (6–8 years).

Gender determination: not possible.

Grave 34

Human skeleton almost entirely destroyed by soil acidity. Several pieces of long bone impressions and two teeth have been recovered. A maxillary premolar (PM) and a deciduous incisor (DI) have been identified.

Age estimation: the stage of tooth eruption indicates the age of a young child, Infans I (2–4 years).

Gender determination: not possible.

Grave 37

Human skeleton almost entirely destroyed by soil acidity. A deciduous canine from the jaw has been kept (DC from the 1/2 quadrant).

Age estimation: the stage of tooth eruption indicates the age of a young child, Infans I (2–7 years).

Gender determination: not possible.

Grave 38

Human skeleton almost entirely destroyed by soil acidity. A few teeth have been recovered: a deciduous canine (DC), a premolar (PM2) and a molar (M1) from the alveolus.

Age estimation: the stage of tooth eruption indicates the age of a young child, Infans I (<6 years).

Gender determination: not possible.

Grave 43

The skeleton is fragmentary; it is especially the impression of the bones that can be seen.

Skull: The skull is fragmentary. Small parts of the skullcap (90% bone impression), the left side of the mandible, fragments of the maxilla, zygomatic bone and orbits (right side) have been recovered (Fig. 7). Dental situation: the dentition is in poor condition due to the soil.

Postcranial skeleton: Upper limbs: right scapula (upper part with traces of bronze oxides), a fragment of the sternal end of a clavicle, right humerus (9:41 mm, traces of bronze oxides on the head), left and right ulna in small fragments (the proximal epiphysis has been preserved), left and right radius in small fragments.

Thoracic area: small fragments of rib diaphysis (ribs II, III, V), a fragment of a thoracic vertebra. Pelvis: small fragments of the iliac bone (there are traces of bronze oxides on the right side), ischium bone, sacrum bone (the distal and left side are missing). Lower limbs: right femur (the lower part is decomposed, 19:46 mm, cortical layer 4–7 mm), left femur in small fragments, right tibia (with the proximal epiphysis preserved), right fibula in small fragments, left tibia (proximal epiphysis and lower epiphysis preserved) and left fibula in small fragments. Foot skeleton: right talus, metatarsals, left talus, a fragment of the left calcaneus, metatarsals.

Metric data taken „in situ": right femur: 1:440 mm, right humerus: 1:285 mm, right ulna: 1:190 mm, right radius: 1:185 mm, left humerus: 1:275 mm, left ulna: 1:215 mm, left radius: 1:205 mm.

Age estimation: sulcus preaericularis (IV, 30–39 years).

Gender determination: although the diameter of the femoral head (19:46 mm), the frontal bone and the orbits show signs of a male individual, the rest of the clues on the postcranial skeleton (pelvic bones, size of the long bones) and the stature of the deceased suggest the presence of a female.

D.	S.
M1, PM2, PM1, C, I2, I1	I1, I2, C, PM!, PM2, M3
D.	S.
PM2, PM1, C	I2, C, PM1, PM2, M1, M2

Table 4. Grave 43, dental formula: 2123.

Estimation of stature: the individual was of small stature: 1.53 m (after the Sjøvold 1990 calculation method).
Pathology: traumatic case, a blow to the middle of the frontal bone.

Fig. 7. Grave 43, imprint of the skull (side view).

Grave 45
Human skeleton almost entirely destroyed by soil acidity. Only a few teeth have been preserved: M1(1), M1 (2), M1(3), M1(4).
Age estimation: the stage of tooth eruption indicates the age of a child, Infans I (5–6 years).
Gender determination: not possible.

Grave 46
Human skeleton almost entirely destroyed by soil acidity and the reopening of the grave.
Skull: A fragment of the parietal bone has been preserved (its surface is porous).
Postcranial skeleton: small fragments of the diaphysis of long bones have been preserved (the cortical layer varies between 2–7 mm), a fragment of a femoral head, a fragment of the diaphysis of a tibia and the impression of the iliac bone (from the pelvis) have been identified.
Age estimation: the size of the long bones and the thickness of the cortical layer show signs of an adult individual (Adultus, >23 years).
Gender determination: not possible.

Grave 48
Human skeleton almost entirely destroyed by soil acidity and the reopening of the grave.
Skull: The skull was recovered in small fragments: fragments of the parietal bone, occipital bone, temporal bone, sphenoid bone, frontal bone, cranial base, internal acoustic pore, frontal part of the mandible without teeth. The bone surface is porous and affected by soil acidity. However, there is a question: is the porosity of the surface caused by the soil or was it caused by a metabolic disease (*Porotic hyperostosis*)? A sole tooth has been preserved, a molar with enamel pearl (the anomaly was formed in the bifurcation of the roots).
Postcranial skeleton: Fragments of rib diaphysis, fragments of one humerus diaphysis, fragments of the left and right tibia diaphysis (with a 3–5 mm thick cortical layer) have been preserved.
Age estimation: the condition of the skull and the only preserved tooth (a molar) indicate the age of an old individual, senilis (over 60).
Gender determination: the features of the skull (mastoid process, occipital protuberance) show signs of a male.
Pathology/ epigenetics: developmental anomaly of a molar tooth.

Fig. 8. Grave 48, developmental anomaly of a molar tooth.

Grave 50
Completely destroyed human skeleton. The impression of the bones does not make it possible to determine the deceased's age or gender.

Grave 51
Human skeleton almost entirely destroyed by soil acidity. A few teeth have been recovered: 2 premolars from the alveolus.
Age estimation: the stage of tooth eruption indicates the age of a young child, Infans I (2–3 years).
Gender determination: not possible.

Grave 56
Human skeleton almost entirely destroyed by soil acidity, pieces of the long bones and some portions of the long bones' impression have been preserved.
Age estimation: possible adult (?).
Gender determination: not possible.

Conclusions

The poor state of human bone material crucially limited the analysis. The high acidity of the soil and the reopening of graves, characteristic for the Gepidic Age cemeteries, made it difficult to analyse the poorly preserved and incomplete skeletons.

The anthropological analysis included the skeletons of 24 individuals. More than half of the graves are child burials (Fig. 9), so macro-morphological methods for gender determination could only be used in a few cases. It was possible to differentiate the skeletons of two males (graves 25 and 48) and one female (grave 43). In one case it was possible to ascertain the presence of an elderly individual in the cemetery (grave 48). The analysis of the children's remains indicates that a significant proportion of the children died before the age of 10.

Stature calculations were possible on one occasion: the woman found with a large amount of grave goods in grave 43 was short (1.53 m).

The identification of paleo-pathological cases was also complicated by taphonomic factors (acid soil, disturbed, incomplete skeletons, etc.). 90% of the cases were dental diseases (graves 25 and 48). One case of metabolic lesion (grave 48: Porotic Hyperostosis) and one of trauma (grave 43: traumatic lesion on the frontal bone) were also noticed.

Scientific examinations (oxygen isotope analysis of teeth, DNA analysis) could not be performed due to poor conservation of the dentition and postcranial skeleton.

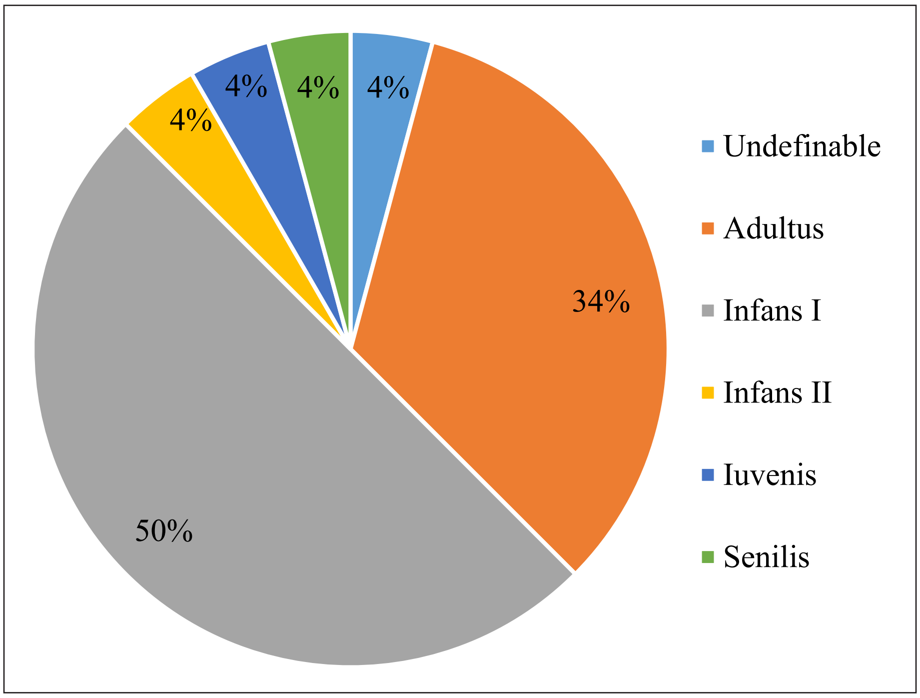

Fig. 9. Distribution of graves by age groups.

IV. GRAVE REOPENING

Alpár Dobos

With the exception of grave 43, all the burials of the cemetery from Ernei were disturbed. The reopening of the graves was visible on the surface after the removal of the topsoil due to the black fill of the reopening pits. These were clearly distinguishable from the slightly mixed yellow clayey fill of the graves (Fig. 10). In many cases the latter was hardly separable from the intact geological clay (Fig. 11).

Secondary grave opening was a widespread phenomenon in the cemeteries from the Migration Period and the Early Middle Ages throughout Europe, but its detailed study has only recently gained momentum (most recently Klevnäs et al. 2021, with further references).

The comparison of regional analyses clearly reflects that the degree of grave reopening varies considerably not only between, but also within regions (Roth 1978, 59–61; Klevnäs et al. 2021, 1012). The available data suggest a higher tendency of grave reopening in Transylvania and, in general, the Central Danube region than in some areas of Western Europe (e.g. northern France, Kent, Bavaria, the Low Countries) (Klevnäs et al. 2021, 1012).[1] The high degree of grave reopening recorded at Ernei is not uncommon for the Transylvanian row-grave cemeteries from the late 5th – mid–7th century (e.g. Vlaha, Band, Bratei – cemetery no. 3, Fântânele–*Dâmbul Popii*, Bistrița. For an overview, see Dobos 2014, 136–140. The situation is similar in the recently excavated cemeteries at Șardu and Topa Mică).

In early medieval Western Europe, grave reopening was mostly associated with row-grave cemeteries used between the mid–5th to the 8th century. Although its early occurrences are known from the late 5th century, it reached its peak in the late 6th century and especially during the 7th century (Roth 1978, 61–64; van Haperen 2010, 13; Klevnäs 2015, 166; Zintl 2020, 99). It can therefore be assumed that it was not yet a widespread phenomenon in the region at the time of the emergence of row-grave cemeteries (Klevnäs et al. 2021, 1015). A different situation can be observed in the Central Danube region, where a higher incidence of grave reopening can be recorded from an earlier date, already from the mid–5th century. In Transylvania, the best example is the very cemetery of Ernei,[2] but from the middle and second half of the 5th century several examples can be mentioned from the Great Hungarian Plain (e.g. Beck et al. 2021, 131), southwestern Slovakia (e.g. Zábojník 1997, 78–79) or from the cemeteries of the Vinařice group in Bohemia (Vávra et al. 2012, 10–13). It is important to note that most of the above examples predated the emergence of row-grave cemeteries, which indicates that in this region

[1] It is important to note that data regarding various regions of Europe are available in different amounts and qualities, as some areas have been analysed in detail, while others have been researched only superficially.

[2] Smaller grave groups bearing traces of reopening were also recorded from the period, e.g. at Bratei (Bârzu 1986, 89–91), in the early grave group at Fântânele–*Dâmbul Popii* (Dobos – Opreanu 2012, 63–66, pl. 3–8) or at Sângeorgiu de Mureș–*Kerekdomb* (Dobos et al. 2021, 339–340).

the reopening of graves is not closely related to this type of cemetery, but is an earlier phenomenon. The fact that it can be documented in the case of small grave groups and cemeteries, which are considered the forerunners of the row-grave cemeteries, suggests a certain continuity. In the context of the Ernei cemetery, but also in a broader Transylvanian context in general, it is important to stress that grave reopening was not unknown in the region during the Late Imperial and Early Migration Period. It is well detectable both in the cemeteries of the Sântana de Mureș – Chernyakhov culture (Körösfői 2015a) and in the Sarmatian – Early Hun Age sites of the Great Hungarian Plain (Kőhegyi 1980; Vörös 1996, 120–121, 42. kép; Pavlovic et al. 2021).[3] It is still an open question to what extent these can be regarded as direct antecedents.

Fig. 10. Grave 63 after removal of topsoil (the reopening pit extends on the western and central area).

Fig. 11. The only undisturbed grave (no. 43) of the cemetery after removal of topsoil.

The date and method of grave reopening can usually be deduced from the size of the reopening pit, its position in relation to the grave, and the position of the bones. In Ernei, three groups can be distinguished in terms of the location of the reopening pits: 1. The reopening pit covered

[3] In a broader geographical context, it also occurs outside the Carpathian Basin in the Imperial Age *barbaricum*, e.g. on the territory of the Wielbark culture (Skóra 2017; Skóra 2019) or the Masłomęcz group (Kokowski 1992).

the entire (23 graves) or almost entire surface[4] (23 graves) of the majority of the graves. 2. A smaller proportion of the burials (18 graves) were opened in the western and central part, the reopening pit did not reach the eastern third (Fig. 10; Fig. 13). 3. The smallest group (5 graves) is represented by the burials where the reopening pit extended roughly over the eastern and middle thirds of the grave. In none of the three cases did the opening pit exceed the outline of the grave, but was almost always located exactly on its surface.

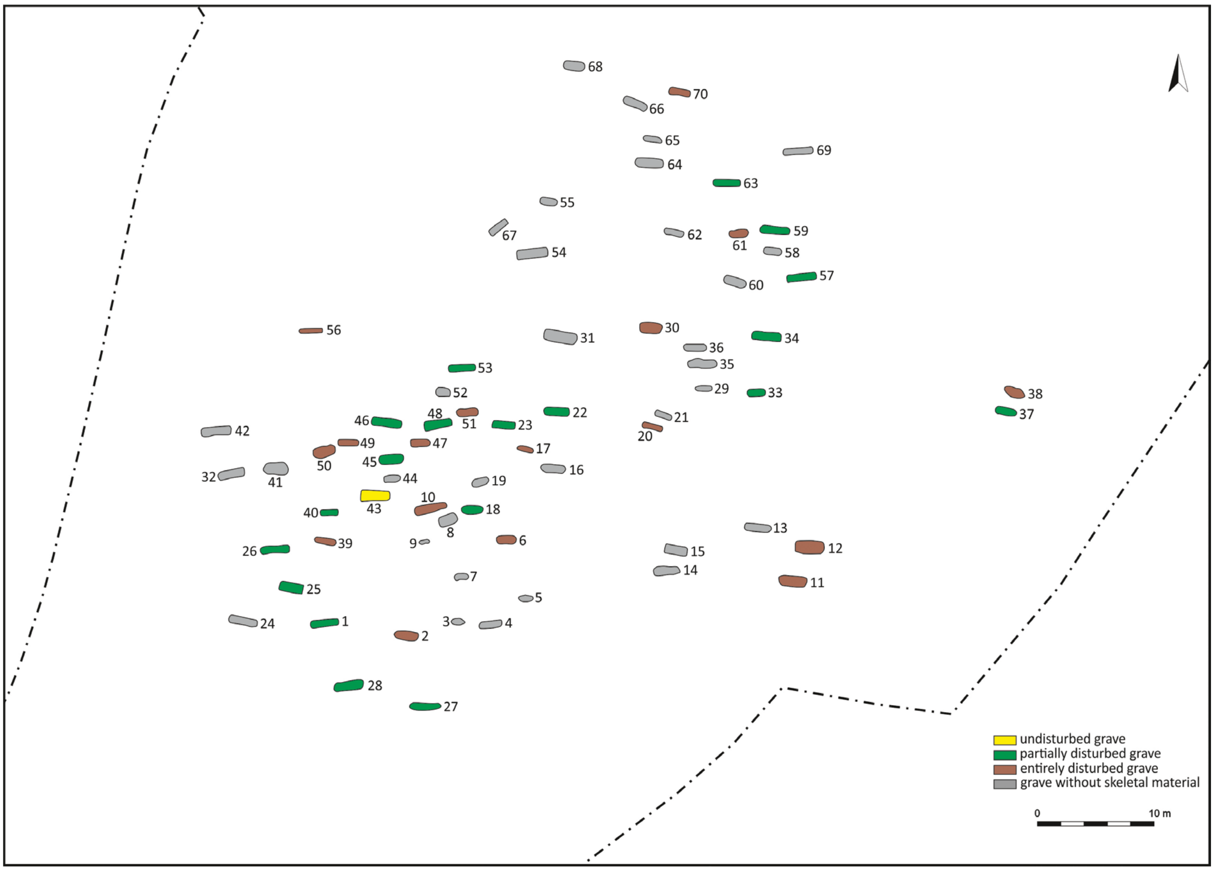

Fig. 12. Grave reopening in the cemetery at Ernei.

The position of the bones can only be conditionally reconstructed in several cases due to the soil conditions. In many cases bones have been preserved either in very fragmentary state or only in the form of imprints, most of them having presumably decomposed, especially in the case of children's graves. The high number of burials (32) with no bones at all is striking (Fig. 12). These include both entirely and partially reopened graves, i.e. all three categories listed above are represented, but there is a clear predominance of group 1. Some of them were completely empty, while others contained grave goods (mostly in secondary position). In the latter case, the possibility has been raised that these graves were opened very soon after the burial, before the soft tissues had decomposed, so that the body could be moved in one piece (Aspöck 2005, 251; Aspöck 2011, 303). Considering that several burials contained only small bone fragments coming from the fill of the reopening pit,[5] and taking into account the low number of bones found

[4] This category includes graves where the opening pit covered almost the entire surface of the grave, except for its western and eastern ends.

[5] These almost empty graves show that the bones were movable at the time of opening, but there is also the possibility that the bone fragments recovered from the fill are not from the individual buried in the grave.

Fig. 13. Grave 22, partial reopening focusing on the western and central area of the burial.

in the other excavated graves, it seems more likely that the burials in question were also opened after the soft tissues had decomposed. In these cases, the bones may all have been taken out.

Bones in a secondary position were found at the bottom of several graves. These occur in both fully and partially opened burials. With the exception of the undisturbed grave 43, only five graves contained bones in original position. These were usually tibiae and belonged exclusively to burials where the reopening pit extended to the western and middle thirds.

In these situations, observations related to the coffin may provide clues to the date of the grave reopening. The condition of the coffin's bottom is an important aspect, as one can assume that the perpetrators did not damage it if it was still intact. Otherwise, it could have easily been dug out with the rest of the grave (van Haperen 2010, 11). Evidence regarding the existence of a coffin is often uncertain due to the soil conditions, but may be sufficient in some cases for drawing cautious conclusions (see chapter V).

The tibiae in grave 22 were in their original position, probably slightly displaced. A long bone and a ceramic vessel were found in secondary position next to the left tibia. There were no other bones in the grave, but glass beads, a cicada brooch and an iron knife were found in secondary position in the western half. All of these were located on the surface of the clearly visible coffin remains, but the bottom of the coffin does not appear to have been damaged during the opening (Fig. 13). In this case, it seems likely that the coffin was still intact at the time of reopening, so that the already separated bones and objects could be moved in the hollow space it had created (corresponds to Group C as defined by Aspöck 2005, 251 and Aspöck 2011, 303). This method involved digging a smaller pit in the west/central part of the grave, then breaking the top of the coffin and using a presumably stick-like tool to pull the objects out, called *Hakenberaubung* in the German literature (for the method, see Sági 1964, 392; Roth 1978, 65–66, Thrane 1978; Aspöck 2005, 243). The method is likely to have been similar in case of grave 25. The opening pit, which grew narrower towards the bottom of the grave, covered its eastern and central third. At the identification level of the coffin, in the middle third of the grave, a black spot may indicate the area where the lid was perforated (Fig. 17). The skull remains recovered from the western end of the grave were only slightly displaced. This opening method might also be assumed for graves 10, 11, 40 and 48.

In graves 68 and 69, the bottom of the presumably log coffins was preserved over their entire surface. It cannot be excluded that they were still relatively intact at the time of disturbance, being easily opened and the bones and objects taken out. However, the bones found in the fill of the opening pit of grave 69 suggest that the reopening took place after the soft tissues had decomposed. By contrast, in grave 34, the eastern end of which avoided opening, the bottom of the coffin was preserved only in the undisturbed part. It is likely that in this case the coffin had already collapsed by the time of reopening, so that a large part of it was dug away together with the opening pit (Fig. 14).

Fig. 14. Grave 34, with the remains of the wooden coffin in the eastern end.

Fig. 15. Grave 25, section of backfill of the reopening pit.

In some cases, two layers were separable in the fill of the opening pit. Beneath the relatively homogeneous black fill, which appeared after the removal of the topsoil, there was a fill mixed with yellow clay, similar in composition to the original fill of the graves, but more heterogeneous (Fig. 15). Analogies suggest that some of the reopened graves were only partially refilled, and their upper part may have been naturally filled over time, that is why it differs so much from the original fill (Aspöck 2011, 302; Vávra et al. 2012, 11; Klevnäs 2013, 57–59; Klevnäs et al. 2021, 1022). In the case of grave 10, this phenomenon appeared as two black spots at the identification level of the grave, which were subsequently found to belong to the same opening pit.

One can only indirectly infer the objects taken from the graves. Generally speaking, from the large amount of available data, it is becoming increasingly clear that the most common objects taken from male graves during reopening were weapons, mostly swords and seaxes, and brooches from female graves (Klevnäs 2013, 72–74; Dobos 2014, 154–155; Klevnäs 2015, 162–163; Zintl 2020, 107–108; Klevnäs et al. 2021, 1017). One can only guess at how far this applies to the Ernei cemetery. In any case, it is intriguing that the only undisturbed grave

belonged to a woman in a dress held together with a pair of brooches, while only one brooch was discovered in the reopened graves altogether. Even more striking are the almost total absence of weapons and the complete lack of swords (including seaxes). Indirectly, the large amber bead of grave 48 may suggest that the grave originally contained a sword or a seax. The spearhead discovered in original position indicates that the grave did contain weapons, so the amber bead can probably be interpreted as a sword bead.

With regard to the objects left in the graves, it is important to distinguish whether they were located on or outside the disturbed surface. Helmut Roth observed that certain categories of objects were more often left in reopened graves even if they were clearly in the disturbed area, i.e. visible to the perpetrators, and could therefore be interpreted as a kind of taboo (Roth 1978, 67–72). Following Roth's suggestion, similar analyses have been carried out in a number of regions, which seem to reveal some trends in the types of objects that are often left in disturbed graves (e.g. Aspöck 2005, 253–259; Klevnäs 2013, 65–74; Dobos 2014, 155–157; Zintl 2020, 105–108).

Six of the ceramic vessels from the Ernei cemetery were definitely found in their original position, five of them in disturbed graves (for more details, see chapter VI.4). In these cases, the pottery was located in the south-west corner of the grave, outside the surface of the opening pit. In other burials, ceramic vessels or fragments of vessels were found either in secondary position or in the fill of the opening pit, indicating that, as also observed in other Transylvanian row-grave cemeteries (Dobos 2014, 157), pottery was probably not the target of the opening. Without a doubt, the same can be said of the glass vessels: one of them came from outside the disturbed surface, and the fragments of another three were recovered from the fill. It is uncertain whether they were broken during the opening or had already collapsed under the weight of the earth and were not removed because of their uselessness.

The only weapons recovered were two spearheads and an uncertainly identified arrowhead. The spearhead from grave 48 was located outside the disturbed surface and the presumed coffin, and therefore may have escaped the attention of the perpetrators. The situation in grave 2 is not entirely clear, but it appears that the spearhead moved somewhat from its original position. Among the weapons found in 5th–8th century row-grave cemeteries, spears are more common in disturbed graves than swords, both on the continent and in Britain (Roth 1978, 71; Klevnäs 2013, 70), but this may be attributed, at least partly, to their peripheral position within the grave (Klevnäs 2013, 70; Dobos 2014, 156–157; Zintl 2017, 249; Zintl 2020, 108).

Among the dress accessories and jewellery, beads deserve special attention, as they were found in a relatively large number in the reopened graves, in all cases in the disturbed area (for more details, see chapter VI.1). Their number varies from 1 (graves 21 and 66) to 514 (grave 45) per grave. Considering that beads are one of the most common finds in reopened graves, the possibility of them having been intentionally left behind has been raised (Roth 1978, 69–70). Stephanie Zintl's detailed analysis clearly showed that, on average, the disturbed graves in Bavarian cemeteries contained significantly fewer beads than their undisturbed counterparts, and it can therefore be stated with a fair degree of certainty that some of the beads were removed from the grave (Zintl 2020, 106–107). Taking into account the small size of these objects, it seems likely that at least some of the beads could have been left in the grave by accident (see also Aspöck 2005, 258–259; van Haperen 2010, 14; Dobos 2014, 156). Of the dress accessories, buckles also appeared in relatively high number in disturbed graves, including quite a number of small silver buckles, which were probably not part of the waist belt but may have been footwear or purse buckles (see also chapter VI.1). Knives, usually in fragmentary form, as well as combs are also common. This observation is in line with the data recorded

in Merovingian cemeteries (Klevnäs 2013, 67; Zintl 2020, 106). Their frequency suggests that knives and combs were not accidentally left in the grave (for different explanations see Klevnäs 2015, 176–177; Zintl 2020, 106).

To sum up, the graves in the Ernei cemetery were opened relatively soon after the burials. Based on the available data, it seems likely that the reopening took place after the decomposition of the soft tissues, when the bones were movable. In the case of some graves, it is assumed that the coffin lid had not yet collapsed by the time of opening. The fact that the opening pit followed the exact outline of the grave, and that no other features (e.g. pits, ditches) indicating the search for the location of the graves were observed in the cemetery area, indicates that the graves must have been still visible on the surface at the time of the reopening. No record from the Ernei cemetery makes it possible to state with absolute certainty that two or more graves were opened at the same time (e.g. common opening pits, bones of the same individual or fragments of the same object in two different graves, etc.), but, of course, this possibility cannot be excluded. Several hypotheses about the identity of the perpetrators and the purpose of the grave reopening have seen the light of day (for an overview, see Aspöck 2005, 236–239; Klevnäs 2013, 83–90; Dobos 2014, 157–161). Without going into further details, it seems likely, in the light of the known parallels, that this was an activity that could have started already when the cemetery was still in use.

V. BURIAL CUSTOMS

Alpár Dobos

The structure of the cemetery

The Migration Period cemetery at Ernei probably fell totally within the path of the future road; as a result, the excavation of the whole necropolis could be carried out. From the perspective of the research, this meant a most advantageous situation. It seems unlikely, but one cannot completely exclude the possibility that small isolated grave groups, similar to the well separated graves 37 and 38, located on the eastern edge of the cemetery, may have existed to the south or possibly northwest.

Based on the 70 excavated burials, Ernei-*Köles-kert* is one of the large cemeteries of the period not only in Transylvania, but also in the Carpathian Basin. In the 'classical' Hun and early Gepidic Age (chronological phases D2–D3), solitary graves and small grave groups were the typical burial forms in the Central Danube region (Tejral 2012, 116–123; Rácz 2016, 304),[1] with only a few cemeteries known with a larger number of burials. This situation changed around the end of the 5th century with the emergence of larger row-grave cemeteries, which were the dominant burial phenomenon during the 6th century. The circumstances and the closer dating of the emergence of the row-grave cemeteries in Transylvania still leave many unanswered questions (Dobos 2019, 112–114; Lăzărescu 2019, 101–102), requiring further research, excavations and publications of new cemeteries. In any case, the Ernei necropolis is an important link in the process.

The graves in the Ernei cemetery are arranged in relatively north-south oriented rows (Fig. 3), which is one of the characteristics of the aforementioned row-grave cemeteries. However, these rows are not regular and the distances between the graves within each row vary considerably. Smaller or larger groups of graves can also be distinguished within the cemetery.[2] Particularly striking are graves 37 and 38, which are completely isolated on the eastern edge of the cemetery. The anthropological analysis indicates that both were burials of small children (Infans I). The high rate of grave disturbance and the incomplete and poor preservation of the skeletal material do not allow a more detailed anthropological analysis that would help explain the observations related to the structure of the cemetery (e.g. identifying family groups). The large distances between the graves within a row, observed in several cases, might perhaps be explained by the community's burial customs according to which empty spaces were possibly left for persons

[1] For possible explanations of the phenomenon, see Rácz 2016, 304; Istvánovits – Kulcsár 2018, 257–260 (both with further references).

[2] Despite the name, the rows in row-grave cemeteries are seldom regular (Ament 2003, 362). Relatively distinct groups of graves were observed in several Gepidic Age row-grave cemeteries (Rácz 2016, 301, footnote 1).

who in the end were not buried in this cemetery. This possible explanation is supported by the relatively short period of use of the necropolis.

Orientation, shape, size and depth of graves, position of the skeleton

The orientation of the graves is uniformly aligned with the W–E axis, with only small deviations in both the north and south directions (Fig. 3). The proportion of graves with WNW–ESE and WSW–ENE orientation is roughly equal. The only exception is grave 67, which shows a greater degree of divergence, with an orientation approaching SW–NE. The W–E orientation of the graves became increasingly dominant during the 5th century, and turned almost exclusive by the second half of the century (Ottományi 2001, 44–45; Rácz 2016, 307–309, Abb. 3). Starting from this period, it is considered one of the main characteristics of the row-grave cemeteries for both the Merovingian (Ament 2003, 362) and Gepidic Age (Csallány 1961, 296; Nagy 1993, 60). In terms of orientation, the Ernei cemetery fits well into the burial customs that started standardizing from the Early Gepidic period onwards.

Reconstructing the data referring to the grave pits is hindered by the high degree of grave reopening. The disturbance has presumably only slightly altered the shape of the grave pits, as field observations suggest that in most cases the reopening pit did not extend beyond the outline of the grave pit. The graves are mostly rectangular with rounded corners or, less frequently, oval. In several cases, the grave walls were stepped and it is not always possible to determine whether these might be the imprints of a coffin, of which no other trace has survived. A step at the western end of some graves housed the ceramic vessels in the southwest corner (see chapter VI.4).

The size of the graves varies, but one can assume that it is mainly related to the height of the deceased. This hypothesis is partly supported by those graves where age determination was possible based on the skeletal material. However, there are several situations when anthropological analysis indicates the burial of a small child (Infans I), but the length of the grave is far greater than necessary (e.g. graves 11, 23, 34, 38, 45). These cases are difficult to clarify at the moment, but given the small amount of the preserved skeletal material, usually found in secondary position, one may not exclude the possibility of the bones ending up in the fill of these graves during reopening.

A connection between the depth of the graves and the age, sex and possibly social status of the deceased cannot be excluded, but is impossible to establish based on the available information. It is important to note that the removal of the topsoil with an excavator is also a complicating factor, as it is assumed that the identification level of some graves may have been at a shallower depth than was recorded during the excavation. All in all, the depth of the graves within the necropolis varies considerably; however, the reasons behind this phenomenon remain unclear.

The only intact skeleton has been preserved in the only undisturbed burial of the cemetery, in grave 43. The deceased was placed in the grave lying on her back with arms extended parallel to the body. This position corresponds to the burial customs known from the period, so a similar position can be presumed for the rest of the graves as well.

Burials with coffin

Evidence of coffins was observed in 15 burials (1, 11, 12, 19, 22, 25, 34, 40, 45, 57, 63, 64, 68, 69, 70), representing just over a fifth (21.12%) of the graves in the cemetery. It is important to note that the identification of burials with coffin depends to a large extent on the quality of the soil, as wooden coffins without metal accessories often turn unrecognisable, the traces of their existence are vague or completely undetectable. Knowing this, it seems likely that the proportion

of coffin burials in the Ernei cemetery was higher than the above number. The graves in which no wooden remains could be identified, but which had a step at their base, raise a question in this regard. In such cases, one cannot exclude that this was not the result of a stepped design, but of a coffin impression.[3] The identification of coffins is further hindered by the high degree of grave disturbance. The remaining coffin traces may have been destroyed in some graves during the secondary opening.

Similar difficulties have been encountered in other cemeteries of the period, making it hard to offer a general picture of the frequency of burials with coffin. This is further complicated by the fact that old excavations recorded no coffin-related observations whatsoever in most cases. Coffins were only indicated in graves from which metal clamps were recovered (Bóna – Nagy 2002, 83–84). Therefore, the quantity and quality of data on row-grave cemeteries from the Gepidic Age varies widely. As a result, the proportion of coffin graves fluctuates considerably from cemetery to cemetery (Bóna – Nagy 2002, 83–85, 168, Tab. 11), but never reaches half of the burials.[4] For a more realistic picture new, thoroughly documented cemeteries will need to be discovered and published.

Fig. 16. Grave 68, remains of the log coffin bottom.

For lack of detailed data, the types of coffins used in the Ernei cemetery can only be reconstructed in general terms. In several cases (graves 11, 22, 34, 40, 57, 63, 68, 69, 70), the coffin was narrow, the cross-section of the bottom curved and the impression concave (Fig. 16). In these graves, a log coffin made from a single piece was most likely used. In such cases, the wooden remains of the coffin base are usually relatively solid and better preserved than those of plank coffins. In several graves, only traces of wood remains were observed, without the shape of the coffin being marked out, so it is not possible to determine whether they were log or plank coffins. The existence of a coffin in grave 25 could be deduced from its more mixed fill (Fig. 17), different from that of the grave. There were no wooden remains found. In this case, a larger rectangular plank coffin can be inferred. No metal coffin clamps were recovered from any of the graves, although it cannot be ruled out that these may have been removed during the reopening of the graves.

[3] These graves have not been included in the above mentioned 15 coffin burials.
[4] The highest rate (37.3%) was recorded at the cemetery in Hódmezővásárhely–*Kishomok* (Bóna – Nagy 2002, 83).

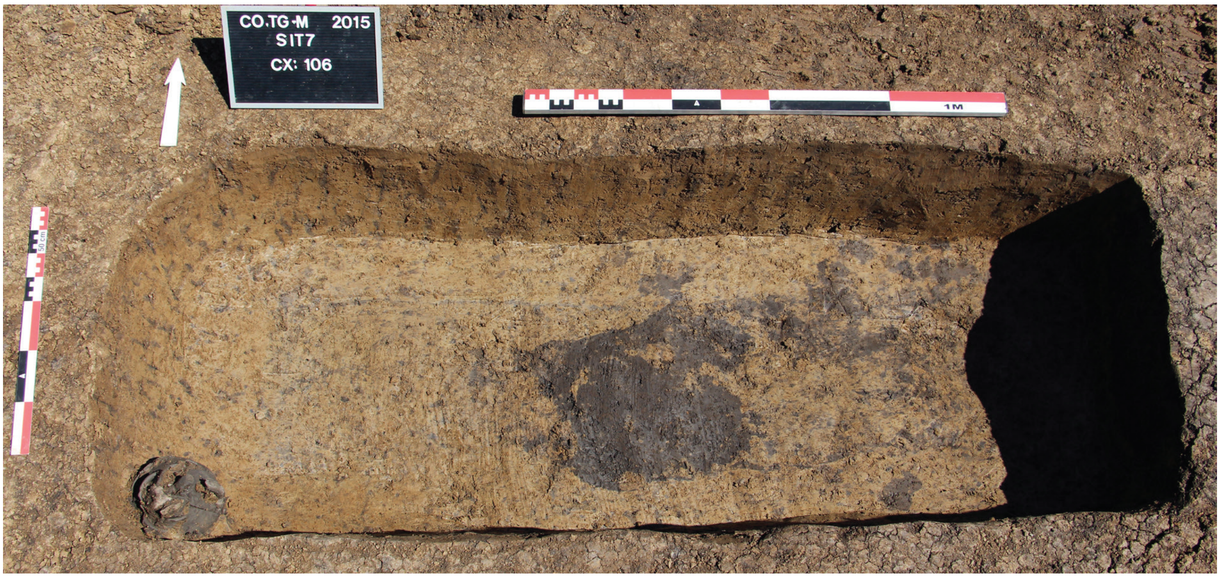

Fig. 17. Grave 25, outline of the coffin visible due to the different fill.

VI. ANALYSIS OF THE GRAVE GOODS

VI.1. DRESS ACCESSORIES AND JEWELLERY
(Alpár Dobos, Márton Ferenczi, Mihály Huba Hőgyes)

VI.1.a. Beads (Alpár Dobos, Mihály Huba Hőgyes)

Quantitative examination and distribution

Out of the 70 excavated graves 20 contained beads. Due to the extremely high degree of grave reopening, one can presume that this number was originally higher. The corpus consists of 1887 beads in total.

The largest number of beads were recovered from grave 45 (n=514), followed by graves 43 (n=429), 47 (n=370), 10 (n=243) and 49 (n=137). Another seven graves contained somewhere between 15 and 40 specimens, three graves a number between 2 and 5, while five graves had only 1 piece each.

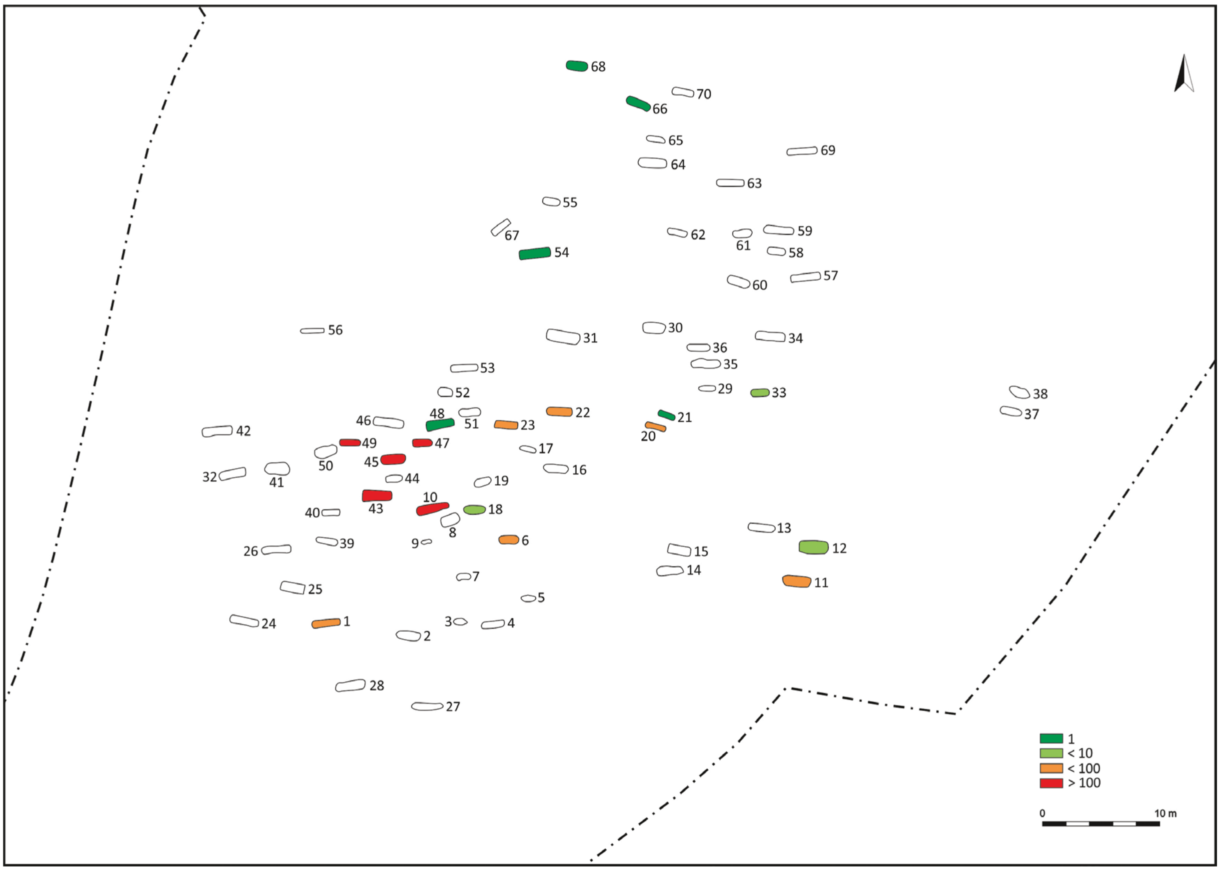

Fig. 18. Spatial distribution of graves with bead finds.

The spatial distribution of burials with bead finds (Fig. 18) in general seems to indicate a cluster in the central-western part of the cemetery, further underlined by a quantitative overview,

which also reveals an important phenomenon: the burials which produced the most beads (graves 10, 43, 45, 47 and 49) cluster together tightly, surrounded by graves with beads recovered in medium quantity. To what extent this distribution reflects reality, remains uncertain, taking into consideration that only one assemblage comes from an undisturbed grave.

From the perspective of the major encountered raw materials[1] (Fig. 19), the most common are beads made of glass, with 1849 items, making up 97.99% of the corpus. Much less frequent are the ones made of (precious?) metal, with 26 specimens (1.38%), followed by those made of amber (10 specimens = 0.53%). Sporadically, other materials occur as well: 1 grave (no. 11) contained a carnelian bead, while from grave 45 a partially preserved bone object was recovered, which, due to its perforation, was also included in the corpus of beads.

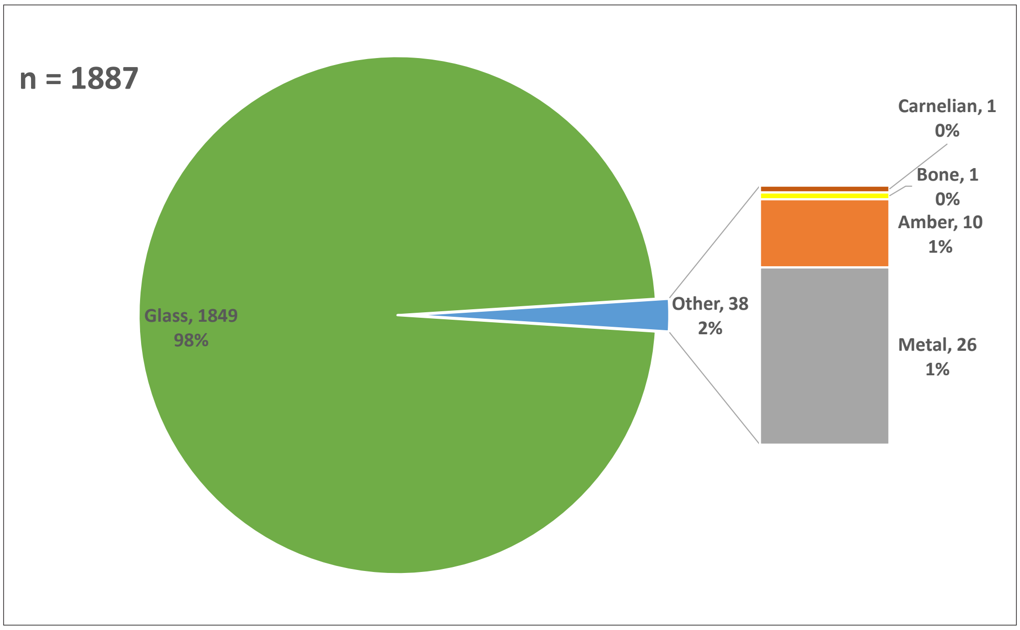

Fig. 19. Quantitative distribution of beads based on the raw material.

Functionality

Beads were among the most common components of female attire during the Migration Period. Their functionality is not always clear and can vary mainly according to their dimensions. Because of the high degree of grave reopening, the original position of the beads inside the graves, which is the most valuable indicator of their function, cannot be clarified anymore. In most cases, the beads were recovered from the fill of the reopening pit or were dispersed on the bottom of the grave.

Based on undisturbed grave assemblages, it is assumed that the small-sized beads were generally worn on strings around the neck, serving as a necklace, while the function of the larger ones varies on a much larger scale (Rácz 2016, 312; Beck et al. 2021, 132). Regarding the former, it has also been proposed that they were sewn on the garment (Bărbulescu 2008, 60–61, 160–161). In the only undisturbed burial at Ernei (grave 43), all the small-sized beads were discovered in the area of the neck and the upper part of the chest (Fig. 20; Pl. 23/43.1) which indicates the existence of one or more strings composed exclusively of these small beads. A similar function can be presumed for the other small beads discovered in the disturbed graves of the cemetery.

[1] Lacking archaeometric analysis, the possibilities were limited; therefore, only five general categories were established: glass, metal, amber, carnelian, and bone.

More uncertain is the situation in the case of medium-sized and large beads, no matter the material. It is particularly grave 10 that deserves attention, because, besides 226 seed beads, it contained 11 intact and 3 fragmentary medium-sized and large specimens. It remains an open question whether the latter were part of the same string as the seed beads, formed a separate string or had other functions.

Fig. 20. Grave 43, detail with the shoulder and chest area.

In grave 43 none of the larger beads were included in the string around the neck, but had other, not quite clear functions. They were discovered in groups of two–three pieces, generally combining glass and amber beads, situated in different areas of the grave and usually arranged in a way that suggests that they were hanging on a string (Pl. 23/43.1).

The first group consists of a glass bead with trail decoration and an amber bead situated in the chest area, on the left side. Similar situations were registered in a few contemporary female burials (e.g. Ártánd–*Lencsésdomb*, grave 1: MESTERHÁZY 2005, 54–55; Mezőkövesd–*Mocsolyás*, grave 2: LOVÁSZ 2005, 52, Abb. 3) and were generally connected to the shoulder brooch (RÁCZ 2016, 312; for the Gepidic Age see CSALLÁNY 1942). Judging from the position of the two beads in grave 43, a similar interpretation, i.e. that these were fixed on a string attached to the brooch, seems plausible. On the other hand, the two beads were lying next to the handle of a knife placed on the chest; thus a connection between them cannot be excluded either.

The next group consisting of a large biconical glass and two amber beads was positioned near the lower part of the spine, on the right side. A fairly similar situation was registered at Turda where three amber beads were lying in an almost identical position (BĂRBULESCU 2008, 59–60, 159–160, Pl./Taf. V/1). Because the beads were situated above the belt buckle it seems highly unlikely that they were fixed on the belt. They most probably had a decorative function and were strung; however, it is unclear how the string was attached to the garment.[2]

Another group, composed of a mosaic and two amber beads, was discovered on the left forearm together with silver sheet fragments. These were situated on the upper end of a presumed leather bag (?). Perhaps the beads, also strung, decorated the mouth of the bag. The large twin bead, found next to the upper end of the left femur, was situated on the top of a comb. It is most

[2] According to the reconstruction by Hermann AMENT (1992, 10–12, Abb. 8), based on observations made in the cemetery from Eschborn and some other sites, such strings of beads were fastened on the shoulder.

likely that the comb was placed in a purse, while the bead served on the one hand for closing the purse and, on the other, for decorating it.

The large amber bead discovered in grave 48 deserves special attention because it comes from a male grave. The disturbed burial contained, among other objects, a spearhead, denoting that the individual was buried with weapons. It seems probable that it contained a sword or a seax as well, equipped with a large bead. Such items made of glass, amber or other materials were widespread throughout Europe during the Migration Period and the early Merovingian Age. Sword beads made of amber are typical accessories of the 5th century (Menghin 1983, 143–144, 356, Liste C.1.b, Karte 19; Anke 1998, I, 100–105).

Technological aspects and raw materials

As mentioned above, the vast majority of the beads discovered at Ernei were made of glass. For lack of chemical analysis there is not too much that can be said about the origin of the raw material, the localisation of possible workshops or the degree of presumed recycling of glass from previous periods, mainly from the Roman Age. Unfortunately, there is almost no information on the subject at other contemporary Transylvanian sites either.[3] It is obvious that a more precise evaluation of this matter is required, which will be an important task for future research.

Generally, there are two basic techniques in ancient glass bead making, both of them identified in the material from Ernei: rod-forming and air-forming (Tempelmann-Mączyńska 1985, 12; Spaer 2001, 44). Rod-forming is the most common technology that can be divided into further subcategories. Among these, the most frequent is winding which implies a rod ('bead mandrel') on which a gob of glass or a reheated prefabricated glass cane is wound (Spaer 2001, 45). During the shaping process of the bead, different tools could also be used. In the case of polychrome beads, the decoration was probably applied at this stage of the workflow. After cooling down the beads were pulled off from the mandrel which might have been coated with some substance to facilitate this action (Spaer 2001, 45–46; Karklins 2012, 68).

Generally, two main types of air-forming are described in the literature, their common feature being the prefabrication and subsequent manipulation of glass tubes, obtained either by drawing by one method or another (Francis 1989, 13; Karklins 2012, 63; Pion et al. 2020, 820–821), or, less often, by blowing. These glass tubes were subsequently shaped and partitioned into multiple individual beads, which may or may not have been altered during the finishing process. The partitioning could be obtained either by cold-cutting or, more frequently, by reheating and segmenting by squeezing. In the latter case, the segmentation could be done individually with a blunt tool or by the rotation of the still viscous tube in a mould with a crenellated surface. Through the second method, more or less uniform beads could be obtained in a relatively short time, which facilitated mass production (Spaer 2001, 46–48, fig. 12; Pion – Gratuze 2016, 52, fig. 6–7; Boschetti et al. 2022, 197, all with further references).

The determination of the manufacturing technique based on macroscopic evidence can sometimes be uncertain. Most helpful are the striations and air bubbles. Wound beads generally display circular or helical striations that encircle the axis (Fig. 21/a), while air-formed beads exhibit a longitudinal structuring of the molten glass, often emphasized by striations running parallel with the axis (Fig. 21/b–c) (Spaer 2001, 55–56; Karklins 2012, 64, 68). Both variants could be identified in a rather large number in our corpus. Based on these observations the

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[3] A recent investigation was carried out on glass beads from cemetery 3 at Bratei and from Sărata Monteoru, both dated in the 6th–7th centuries, which managed to identify different glass compositions (Bugoi et al. 2020).

majority of the beads from Ernei are rod-formed, drawn specimens comprising exclusively variously coloured seed and small cylindrical beads (types A.I.2–A.I.4).

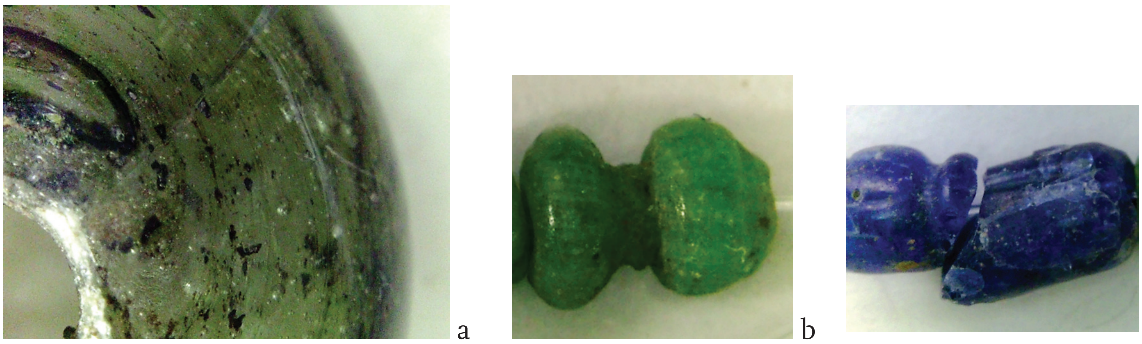

Fig. 21. a. Wound bead from grave 10 (with circular striations around the axis); b–c. Beads manufactured by drawing and segmenting from graves 20 and 49 (with longitudinal striations).

A more complex manufacturing technique, requiring considerable skill, was used to obtain mosaic beads. For lack of direct evidence regarding the production process of mosaic beads in the Migration Period, this technique was reconstructed in two main ways. Basically, the technique involves the combination of prefabricated glass cane sections with different patterns. To obtain these, glass canes of different colours were combined, fused and drawn so that the cross-section formed the desired pattern. Subsequently, these were cut into slices (see Spaer 2001, 51–52, fig. 17–19; Volkmann – Theune 2001, 525–526, Abb. 1/3–4, 3a). One of the possibilities to obtain a mosaic bead is to apply the cane sections on a viscous gob of glass, wound around a mandrel, which serves as a basic bead (Spaer 2001, 118; Boschetti et al. 2022, 197). The second method implies the arrangement of the cane sections in a way that these form the overall pattern of the desired bead. Then these are fused and the resulting strip is wrapped over a rod (Spaer 2001, 118; Volkmann – Theune 2001, 526, Abb. 1/5–7). It seems likely that in the case of the only mosaic bead from Ernei (type A.II.4) the latter technique was applied, taking into account that a line is clearly visible where the two ends of the strip were joined (Fig. 22).

Fig. 22. Mosaic bead from grave 43 (the arrows show the line where the ends of the strip were joined).

For the metal beads discovered at Ernei two main techniques could be identified. The larger category (group B.I) consists of beads made of metal sheet. In this case, the metal sheet was cut and consequently folded and shaped to the desired form. The second, much less numerous category (group B.II) comprises small spiral beads made of coiled wire.

Another important material, represented in a much smaller amount in comparison to glass, is amber. Unfortunately, there has been no opportunity to carry out infrared spectroscopic or any other kind of analysis yet, in order to determine the origin of the raw material. Taking into account the large number of amber beads in the Carpathian Basin during the Migration Period as well as the results of former scientific analysis (Sprincz 2003), it seems plausible that Baltic amber ('succinite') was widely used (e.g. Curta 2007). On the other hand, there are several other European sources (Beck 1985, 191, fig. 1) which might be potential places of provenance. For the beads from Ernei, besides the Baltic origin, the amber sources from the area of present-day Buzău County, especially around the village of Colți might be considered (Ghiurca 1999,

394–397; Truică et al. 2012, 3524). Amber originating from this region ('romanite')[4] was used as early as the Late Bronze Age (Teodor et al. 2016, 12).

During the Migration Period, one can encounter a particularly large quantity of amber beads in the Middle Danube region, a fact that suggests an inflow of Baltic amber. In Roman times the amber trade was carried out along the 'Amber route', whose trajectory could be reconstructed based on written sources and archaeological evidence (see e.g. Jovaiša 2001, 151, illus. 1; Bliujiené 2011, 199–202, fig. 9, both with further references). This commercial route remained in use during the Migration Period too; however in the current stage of research it is not entirely clear how the distribution of amber took place in the Middle Danube region and how it reached the communities living further away, like the one at Ernei.[5] According to Florin Curta (2007), during the Early Middle Ages the large number of amber beads cannot be explained with 'classical' commercial activities, but rather with a well-established gift-exchange system related to the elites. In any case, the popularity of amber decreased massively after the 7th century and it was extremely rare in the late Avar Age (Curta 2007, 71; Gáll – Mărginean 2021, 212). Likewise, the localisation of workshops producing amber beads remains unsettled. Due to an unfinished bead and two pieces of raw amber discovered in female grave 74 from the Gepidic Age cemetery at Hódmezővásárhely–*Kishomok*, a local amber bead workshop was proposed (Bóna – Nagy 2002, 120, Taf. 20/74.5, 7–8); however, no traces of local workshops have been identified to date.

Regarding the manufacturing techniques, two main processes can be distinguished, both identified at Ernei: hand carving (group C.I) and turning on a lathe (group C.II). For shaping, generally in a heated condition, metal or stone tools could have been used. The lathed beads usually have a more symmetrical shape and bear turning marks on the surface (Tempelmann-Mączyńska 1985, 14). They were perforated by drilling, sometimes from both sides (as it was observed e.g. in the case of the bead from grave 66). As the state of preservation of the surface is not always good enough, the distinction between hand-carved and lathed specimens is not totally certain.

Typological classification

As there is no comprehensive typological study for the region's Migration Period beads, an individual typology was created for the beads from the cemetery at Ernei (Fig. 23). Reference is made to existent typologies of other periods and geographical areas, where possible.

For the typological division of the beads from Ernei, the raw material was taken as a primary criterion. Five different raw materials were distinguished which are presented in the order of their frequency within the cemetery: A. glass; B. metal; C. amber; D. carnelian; E. bone. Glass beads were further subdivided into two categories: monochrome and polychrome beads. Both categories include several different types which were distinguished according to their manufacturing technique, size and shape. Both the metal and amber beads were separated into main categories based on the manufacturing technique, which in turn were divided into types on formal grounds.

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[4] Romanite is chemically almost identical to Baltic amber; for methodological aspects of differentiating the two categories see Teodor et al. 2009; Truică et al. 2012; Teodor et. al. 2016.

[5] The importance of the former, Roman Age infrastructure seems plausible, as it was demonstrated in the case of the Avar Age amber beads (Gáll – Mărginean 2021, 212–213, fig. 5A).

A. Glass beads

A.I. Monochrome beads

Type A.I.1. – Black seed beads

The beads belonging to this category are made of opaque black glass and due to their small dimensions were coined seed or millet beads in the archaeological literature. These constitute the most abundant category of beads in our corpus, with a total number of 1427 items retrieved from 13 graves.

At this stage of research, based mainly on macroscopic observations, one cannot determine their exact manufacturing technique due to their general characteristics (their minuscule nature and the dark, opaque paste obscure their internal structure, in contrast with the other major category of the seed beads). However, the shallow helical grooves observable on the surface suggest a spinning movement. In any case, from a technological point of view, they are distinguishable from the other, variously coloured seed beads, discussed below (type A.I.2).

A categorisation attempt based on the shape and length/diameter ratio of this vast quantity of beads would be futile, as almost all of them could be classified, according to Beck's descriptive system, as rounded, with a circular cross-section (Beck's Subdivision I, Group I: Beck 2006, 5, pl. I). Due to their elongated shape, the conical seed beads form an exception.

More relevant from a typological perspective is the issue of their surface treatment: on a large percentage of the specimens, traces of very thin, gold-coloured coating could be observed on the surface, in various states of degradation.

On these grounds, three variants of this type can be distinguished:

Type A.I.1.a – Simple, rounded black seed beads

Graves 1 (1) 6 (28), 9 (7), 10 (187), 11 (12), 20 (6), 22 (29), 23 (26), 45 (198) and 47 (346)[6]

Type A.I.1.b – Rounded black seed beads with coated surface

Graves 12 (1), 22 (6), 23 (3)43 (233), 45 (221) and 49 (120)

Type A.I.1.c – Conical black seed beads with coated surface

Grave 43 (3)

An exact estimation of the coated items' proportion (types A.1.1.b and A.1.1.c) seems inopportune due to the general bad preservation of these small beads (particularly the widespread exfoliation of the surfaces); however, some cautious observations can be made. According to our statistics, they seem to surpass their plain counterparts, (cca. 935, vs. 492 plain specimens). In grave 45 the two variants occur simultaneously, the one with coating being overrepresented. Out of the five large assemblages from the necropolis, the coated ones are exclusive in three.

Regarding their production technique, in the case of the coated items we could not observe traces of a 'sandwich-like structure'; therefore, we are inclined to exclude the widely discussed gold-in-glass technique (see e.g. Spaer 1993, 10–14; Spaer 2001, 131; Greiff – Nallbani 2008, 359–360, all with further references).

Grave 49 yielded 95 black seed beads with variously exfoliated thin, gold-coloured coating and another 25 specimens, which exhibited different characteristics: a matte, light yellow, somewhat chalky, fragile paste, with a crackled surface. For lack of further investigations, it is uncertain whether these constitute a different subtype of seed beads, perhaps of a different material or production technique; thus, for the time being, they were included in type A.I.1.b.

[6] The number of specimens discovered within one grave is given in brackets.

Type A.I.2. – Small, air-formed, single-segment seed beads

This type comprises the second largest number of beads (316) after type A.I.1. These were manufactured from drawn glass tubes and generally have globular or annular shapes (with a few atypical exceptions), most of them similar to that of beads belonging to the previous type. In the cemetery at Ernei they were registered in four different colours:

a. green: graves 1 (16), 6 (3), 10 (39), 12 (1), 18 (1), 20 (6), 21 (1), 43 (68), 45 (43), 47 (20) and 49 (14);

b. red: graves 18 (1), 43 (94) and 45 (3);

c. blue: graves 9 (3), 18 (1) and 45 (1);

d. yellow: grave 18 (1).

Type A.I.3. – Small double and triple-segmented beads

The beads included in this category are strongly related to the previous type in terms of manufacturing technique, dimensions and shape. The only difference is that these consist of two or, less frequently, three unseparated segments. The following variants could be isolated by colour and the number of segments:

a. green: double-segmented: graves 1 (3), 20 (3), 43 (3), 45 (11) and 47 (1); triple-segmented: grave 45 (1);

b. red: double-segmented: grave 20 (1) and grave 43 (10); triple-segmented: grave 43 (2);

c. blue: double-segmented: graves 9 (1), 23 (1) and 49 (1).

Type A.I.4. – Small cylindrical beads

The cylindrical beads represent the simplest shape of drawn beads since they diverge the least from the original form of the prefabricated glass tubes. In several instances, the beads of this type, belonging to the same assemblage, originate from different glass canes, as indicated by their obvious difference in diameter. Numerically these are the smallest group of drawn beads and occur in three different colours:

a. green: graves 23 (1), 33 (1), 45 (12) and 49 (1);

b. red: graves 33 (4), 43 (1) and 45 (7);

c. blue: graves 1 (1) and 45 (4).

From the perspective of their morphological traits, they can be best described as standard cylindrical, based on Beck's (2006, pl. II–III) descriptive system, with a few exceptions (which tend to be short cylindrical). The lack of longer or other related (e.g. prismatic or polygonal) specimens, well attested in the contemporary sites, remains an open question.

The cylindrical glass beads of different dimensions and colours were widespread both in the Late Imperial Age and the Migration Period (TM group XV, types 135–142: Tempelmann-Mączyńska 1985, 38–39, Taf. 2/135–138, 3/139–142).

Type A.I.5. – Medium-sized annular beads

Graves 10 (1) and 45 (1)

The bead from grave 10 is made of opaque black glass and has an annular shape. The fragmentary black specimen from grave 45 probably had a similar shape. Both are manufactured by winding.

From a morphological point of view, these can be related to TM type 40 of group II in the Central-European Barbaricum typology, where they are characteristic for the Late Imperial Age and mainly for phase D (Tempelmann-Mączyńska 1985, 29, Taf. 1/40). This rather simple

Fig. 23. Typological classification of the beads.

bead type is also known from the Sântana de Mureş – Chernyakhov cemeteries (e.g. Gopkalo type II/1: Gopkalo 2008, 17, Tabl. I/II.1; Budeşti type 3: Vornic 2006, 208).

Type A.I.6 – Flattened globular and globular beads

The type comprises beads with flattened globular or globular shapes made of translucent or opaque glass. The colour and the dimensions of the beads vary significantly. All of them were manufactured by winding. The type can be subdivided by size, shape and material into further subtypes.

Type A.I.6.a – Medium-sized flattened globular beads made of translucent glass

Grave 45 (1)

The only specimen included in this category is made of translucent cobalt blue glass and has a flattened globular shape. It corresponds to Viminacium type 71, known from large areas of Europe during the 5th–6th centuries (Ivanišević et al. 2006, 88–89, fig. 68/104).

Type A.I.6.b – Large flattened globular beads made of translucent glass

Grave 10 (11)

Beads of this type were discovered only in one grave in the cemetery. All of them were manufactured from translucent glass by winding, indicated by their clearly visible coiled structure. Their colour varies from almost transparent light through dark and olive green to greenish brown.

From a typological point of view, these can be related to beads of TM group II, type 42 that were widespread for a long period, between chronological phases B1 and D (Tempelmann-Mączyńska 1985, 31, Taf. 1/42a–b). Several analogies are known from the 5th century Middle Danube region as well (Viminacium type 75: Ivanišević et al. 2006, 90, fig. 69/110, with further references). In Transylvania, such beads can be mentioned from Fântânele, grave 4 (Crişan – Opreanu 1991, 119–120, fig. 3/1–3, 8; Dobos – Opreanu 2012, 66, pl. 7/1f–i; 35/6f–i), dated to the middle/third quarter of the 5th century and from Slimnic, dated to the second half of the 5th century (Glodariu 1974, 484, Abb. 2/3; I Goti 1994, III.19/b).

Type A.I.6.c – Flattened globular and globular beads made of opaque glass

Graves 10 (1), 23 (1) and 54 (1)

Two specimens (graves 23 and 54) were made of brick-red and one (grave 10) of black glass. The dimensions vary considerably, the latter being the largest with a diameter of over 15 mm. The small bead from grave 54 has a diameter of less than 7.5 mm. In the Viminacium typology, the brick-red specimens correspond to type 70, while the black ones to type 73, both with analogies dated mainly to the Migration Period (Ivanišević et al. 2006, 88–90, fig. 68/100–102; 69/107).

Type A.I.7. Biconical beads

Type A.I.7.a – Translucent biconical beads

Grave 43 (1)

The only bead belonging to this category is rather poorly preserved. It was made of translucent olive green glass by winding and has a truncated double conical shape. The specimen from

grave 43 is noticeably larger than the rest of the beads from the cemetery and possibly is an imitation of large rock crystal beads. Similar glass beads are known mainly from the territory of the Sântana de Mureș – Chernyakhov culture, however not in a very large number. They were included in Gopkalo type XII/14 and are dated to the late phase of the culture, i.e. no earlier than the second third of the 4th century (Gopkalo 2008, 31, Tabl. II/XII.14).

Type A.I.7.b – Opaque biconical beads
Grave 20 (3)

The three black beads with more or less pronounced truncated biconical shape are strongly related to the category of opaque beads with flattened globular shape (type A.I.6.c); the only difference consists in their less rounded profile.

Type A.I.8. – Pear-shaped beads
Graves 9 (2) and 45 (1)

The beads of this type were manufactured by winding and are characterised by a somewhat asymmetric, longish shape. Only three specimens can be included in this type with certainty, one of them preserved in a fragmentary state (grave 9).

Pear-shaped beads are fairly rare, although not unknown from 5th-century graves: good analogies can be mentioned, for example, from Singidunum II, grave 15 (Ivanišević et al. 2006, fig. 58/3), Szekszárd–*Palánk*, grave 217 (Kiss 1996a, 56, Abb. 7/22) or Sânpaul, grave 3 (Grumeza – Cupcea 2020, 418, fig. 6/6). The string from Singidunum, grave 15 was considered to be characteristic for group III of beads from Viminacium and Singidunum, dated roughly in the second half of the 5th century (Ivanišević et al. 2006, 102–103, fig. 75).

Type A.I.9. Polyhedral beads
Grave 10 (1)

Only one large polyhedral bead was discovered at Ernei, made of translucent, deep blue (almost black) glass. Though no visually identifiable signs reveal its primary manufacturing technique, usually such items are classified as wound beads, their rectangular cross-section being the result of pressing the still viscous glass against a flat surface (Ivanišević et al. 2006, 53).

The polyhedral beads made of various materials (mainly glass, carnelian and amber) are among the most common forms of the Late Imperial Age and the Migration Period, being fairly widespread both chronologically and geographically. Of the glass specimens, the blue ones occur most frequently (TM group XIV, type 126: Tempelmann-Mączyńska 1985, 37–38, Taf. 2/126; Viminacium type 39–39a: Ivanišević et al. 2006, 79, fig. 67/61–64; Gopkalo type XVII/10: Gopkalo 2008, 40, Tabl. IV/XVII.10).

The production and fashion of this type have their origins in late Roman context, with its first occurrences dated as early as the C1 phase (Tempelmann-Mączyńska 1985, 37), attested both in the territory of the Roman Empire (e.g. at Augusta Raurica: Riha 1990, 90–91, Taf. 39/1342; in north-western Europe: Böhme 1974, 40; in the Danubian provinces: Keller 1971, 87–88 or at Callatis: Preda 1980, 56, pl. XXVII), as well as in the Barbaricum (for a comprehensive overview see Ivanišević et al. 2006, 79–80). In Roman Dacia, such beads were produced in the workshops at Tibiscum (type IV: Benea 2004, 66–67, 197, Taf. I/Typ IV, Abb. 30/Typ IV). During the Late Imperial Age, they are frequently attested in the cemeteries of the Sântana de

Mureș – Chernyakhov culture (Kazanski – Mastykova 2003, 156; Ivanišević et al. 2006, 80; Gopkalo 2008, 40–41) as well as in Sarmatian contexts west from Transylvania (Vaday 1989, 99, Abb. 20/V; Grumeza – Bârcă 2020, fig. 3/Group V).

During the 5th century, polyhedral glass beads remained popular throughout Europe, including the Middle Danube region (Ivanišević et al. 2006, 80–81). In Transylvania, a blue specimen comes from grave 4 from Cluj–*Cordoș*, dated in the second half of the 5th century (Hica – Ferenczi 2006, 931, fig. 1/3). Even if significantly less frequently, the glass polyhedral beads continued to be used during the Gepidic Age[7] and the Early Avar Period (Pásztor 1996, 204) as well.

A plausible dating for the specimen from Ernei can perhaps be based on the typo-chronological sequence proposed for the Viminacium and Singidunum necropolises, where such beads occurred in the assemblages belonging to groups I and II, dated to the D2–D2/D3 periods (Ivanišević et al. 2006, 100–102, fig. 71; 73). Even considering the high degree of grave disturbance, it is still surprising that the cemetery at Ernei yielded only a single piece of polyhedral glass bead, taking into account its popularity during this period. Though it is in a generally good state of preservation, several clues indicate prolonged wear. Such are the moderately rounded surfaces at its corners and the edges of the facets, as well as a string-induced alveolar wear pattern on one end.

A.II. Polychrome beads

Type A.II.1. – Single beads with trail decoration

The specimens included in this category are simple wound beads decorated with applied glass stripes of different colour(s) than that of the bead. Only four such beads were discovered at Ernei, which, according to their shape and colour belong to three different variants:

Type A.II.1.a – Pear-shaped brick-red bead with white trail decoration
Grave 49 (1)
Type A.II.1.b – Flattened globular brick-red bead with white and light blue trail decoration
Grave 68 (1)
Type A.II.1.c – Flattened globular black beads with white trail decoration
Grave 43 (2)

Trail-decorated pieces are among the most common categories of polychrome beads during the Late Imperial Age and the Migration Period. One can notice a rather large diversity both in terms of colour and decorative motifs (see e.g. Tempelmann-Mączyńska 1985, 52–58, Taf. 5–11, Gruppe XXII). Compared to the Central European Barbaricum, these are much less frequent both on Sarmatian (Vaday 1989, 102; Grumeza 2020, 437; Grumeza – Bârcă 2020, 407–409) and Sântana de Mureș – Chernyakhov territory (Mączyńska 1997, 104).

The brick-red specimen from grave 49 (type A.II.1.a), decorated with a single, more or less horizontal white stripe is unique in this category not only because of its less usual colour, but also due to the fact, that, according to our observations, it is the result of an imperfect manufacturing process: the quite striking deformation on its upper end, affecting not only the matrix, but the decoration as well, is most probably the result of its untimely detachment from the mandrel.

The small brick-red bead from grave 68 (type A.II.1.b) has a similar shape and colour as the undecorated one from grave 54 (type A.I.6.c). The spiralling trail decoration was probably obtained using a composite glass cane of white and light blue colours.

7 Graves 3 and 50 from Morești (Popescu 1974, 214, 225, Taf. 1/3, Taf. 12/3; Horedt 1979a, Abb. 72/5, Abb. 82/4) and grave 3 from Sighișoara–*Dealul Viilor* (Harhoiu 2015, 238, Abb. 7A/a.1–3) can be mentioned from Transylvania.

The two small, flattened globular beads from grave 43, included in type A.II.1.c, share a similar opaque, black paste and are decorated with white stripes. The only significant difference consists in the pattern of their ornament. Both the zig-zag and the so-called 'eight-shaped' decoration can be traced back to Roman Age roots, the latter being attested in a quite large number at the bead production site from Tibiscum (types XIII–XIV: Benea 2004, 73–76; 203–206, Taf. II/Typ XIII–XIV).

In the Central-European Barbaricum the earliest zig-zag decorated beads (TM group XII, types 252–265) can be dated as early as the B2 and B2/C1 periods, and are characteristic finds of the Late Imperial Age and the Migration Period (Tempelmann-Mączińska 1985, 53). Even if quite rare, these can be found in graves of the Sântana de Mureș – Chernyakhov culture (e.g. Lețcani: Bloșiu 1975, 235, fig. 15/3; Budești: Vornic 2006, 208, fig. 7/1; 115/24–25; Bratei, cemetery 1: Bârzu 1973, 72, pl. XXVIII/6; Pietroasele – dated in phase D1: Diaconu 1986, 179, Abb. 2/16; Harhoiu 1998, 185, Taf. LXXVII/A.12; see also Gopkalo 2008, 53, Tabl. V/XI.1.a). In the Middle Danube area, such beads occur only occasionally during the 5th century, e.g. at Ártánd-Biharkeresztes–*Kisfarkasdomb*, grave 12 (Mesterházy 2007, 288, Abb. 3/9). An exceptional find can be mentioned from Tiszaföldvár–*Érhalom*, where the string discovered in grave A contained nine specimens (Cseh 2005b, 35, Taf. 40/A.2, 101/1).

The beads with eight-shaped decoration have a similar chronological distribution. In Central Europe, they were dated mainly to the Late Imperial Age and the Migration Period (TM group XXII, type 266: Tempelmann-Mączińska 1985, 53). Less frequently they occur in Sarmatian (Grumeza – Bârcă 2020, fig. 4/Group IV.1–4) and Sântana de Mureș – Chernyakhov environment (e.g. Rafalovich 1986, 56, Tabl. XXVII/9; Gopkalo 2008, 52–53, Tabl. V/VIII.1.a). From the 5th century Middle Danube region such beads can be mentioned e.g. from Mád (L. Kovrig 1951, 114, XLVI. tábla) or Szekszárd–*Palánk*, grave 217 (Kiss 1996a, 56, Abb. 7/11).

Black beads with trail decoration were registered in the Merovingian cultural milieu as well, e.g. in the Lower Rhine area, occurring predominantly in Cluster B, dated around the middle–third quarter of the 5th century (type 31.7: Siegmund 1995, 45, pl. V/31.7), in South-Germany (Koch 1997, Taf. 9/27,37), as well as Anglo-Saxon England (Guido 1999, 22–23, pl. 2/2via). A few pieces are known from the Langobard Age Transdanubia (Nagy 2012, 168–169, 17. kép/14–19, with further examples), while in the eastern half of the Carpathian Basin they were extremely rare during the Gepidic Period.[8]

Type A.II.2. – Double beads with trail decoration
Grave 43 (1)

The large wound double bead from grave 43 is unique in the cemetery both in terms of shape and decoration. It is composed of two flattened globular segments made of black glass, each decorated with a red line surrounded on both sides by a white wavy line.

From a typological point of view, the uniqueness of this bead is given by its twin shape. The decoration is more complex than that of the beads included in the previous type, although the combination of simple and wavy lines of different colours was a relatively widespread ornament during the Roman Imperial Age and the Early Migration Period, applied mainly on large beads. Such decoration is known in a rather large variety in the Central-European Barbaricum (TM group XXII, types 293–303; the closest to the specimen from Ernei being

[8] E.g. Szolnok–*Szanda*, grave 24, with yellow stripes: Bóna 2002a, 205, Taf. 32/24.1; Tarnaméra–*Fehér István homokbányája*, with eight-shaped decoration combined with red dots: Nagy 2002, 238, Taf. 56/3; Tiszaug: B. Tóth et al. 2022, 224, no. 319.

type 300a: Tempelmann-Mączyńska 1985, 55–56, Taf. 7/292a–297d, 8/297e–303g), in the North-Pontic area (Alekseeva 1978, 52–53, Tabl. 31/60–67) and the Sântana de Mureș – Chernyakhov culture (e.g. Târgșoru Vechi: Diaconu 1965, 109, pl. CXXXVIII/17; Lețcani: Bloșiu 1975, 216, fig. 30/8; Budești: Vornic 2006, 208, fig. 115/30; Mihălășeni: Șovan 2009, 157, pl. 185/9; 278/32; see also Gopkalo 2008, 54, Tabl. V/IX.8.a–b). From phase D1, one can mention grave 1 at Pietroasele (Diaconu 1986, 179, Abb. 2/5, Abb. 3/3; Harhoiu 1998, 185, Taf. LXXVII/A.13) and, geographically more closely, feature G27 at Ernei–*Carieră*, which contained three such beads belonging to two different variants (Crișan – Lăzărescu 2010, 226, pl. 11/2–3).

Type A.II.3. – Crumb beads
Graves 11 (2) and 22 (1)

The type comprises three relatively large beads of flattened globular shape made of opaque, dark blue glass and decorated with haphazardly arranged small white, red and blue spots.

The term crumb bead[9] (Beck 2006, 42, 62–63) refers to the manufacturing technique, namely that the decoration is obtained by rolling the bead on the rod over glass crumbs while it is still hot (Spaer 2001, 53, 127; Beck 2006, 62). All the beads from Ernei have the crumbs marvered flush with the surface.

Crumb beads were rather popular during the Migration Period. Generally, these are made of dark blue glass and are decorated either with white and red or, less frequently, only white speckles (Viminacium type 34 and 34a: Ivanišević et al. 2006, 73–76, fig. 67/53–55). Their forerunners are known in a considerably smaller number from the Imperial Age Barbaricum in Central Europe (TM group XX, type 198: Tempelmann-Mączyńska 1985, 47–48, Taf. 4/198a–f), in the Sarmatian[10] (Grumeza – Bârcă 2020, 409, fig. 4/Group 1.A) and the Sântana de Mureș – Chernyakhov milieu (e.g. Vulpe 1957, 301, fig. 321/1; Vornic 2006, 208, fig. 94/1–2; 115/37; Gopkalo 2008, 48, Tabl. V/I.10.a–b); however, these are more varied in terms of the decorating colours than their counterparts from the Migration Period.

During the 5th century the crumb beads spread over large areas of Europe: they are attested in early Anglo-Saxon Britain (Guido 1999, 53–54, pl. 5/6xi), on early Merovingian Age sites in Gaul, on the territory of present-day Germany, as well as in the Middle Danube region of the Hun Age and afterwards, the North-Pontic region, the northern Caucasus and the Don region (Ivanišević et al. 2006, 73–76). On the grounds of this large-scale distribution, the eastern Mediterranean area was suggested as the most probable production centre (Mastykova et al. 2005, 302). From a chronological point of view the type can be dated beginning with the Untersiebenbrunn horizon (first half of the 5th century), reaching its peak during the middle and the second half of the 5th century. In some peripheral areas, such beads were in use also in the 6th century (Ivanišević et al. 2006, 76). In the Carpathian Basin, only a few late specimens were discovered in Langobard and Gepidic Age cemeteries and even fewer in the Early Avar Age. These may be interpreted as archaic finds (Nagy 2005a, 100; Nagy 2012, 168).

In Transylvania an early specimen dated to phase D1 was discovered in feature G27 at Ernei–*Carieră*, yet of different shape and with red, yellow and light blue speckles (Crișan – Lăzărescu 2010, 226, pl. 11/1). Most of the Transylvanian crumb beads come from Sânpaul (three pieces in

[9] For other terms used in the archaeological literature, see Spaer 2001, 127.

[10] Most of the polychrome glass beads from the Sarmatian Barbaricum lying east of Dacia were produced in the province, as attested by the bead workshop at Tibiscum (Grumeza 2020, 440–441; Grumeza – Bârcă 2020, 409) which manufactured crumb beads as well (Benea type XII: Benea 2004, 112, 239, Taf. II/Typ XII).

grave 3 and one piece in grave 1) where the accompanying large silver sheet brooches indicate a dating in the D2/D3 chronological phase (Grumeza – Cupcea 2020, 414, 418, fig. 3/5; 6/7–9). From the second half of the 5th century, a specimen is known from the female grave at Slimnic (Glodariu 1974, 484, Abb. 2/3; I Goti 1994, fig. III.19/b). Another crumb bead was found in grave 3 of the Gepidic Age row-grave cemetery at Florești–*Polus Center* (Ferencz et al. 2009, 442–443, pl. V/1.a). With some exceptions (e.g. Mártély: Nagy 2005a, 97–98, 5. kép/1–7, 7. kép/11; Viminacium–*Burdelj*, grave 63: Ivanišević et al. 2006, 159, fig. 72; Mukhino 2: Mastykova – Zemtsov 2014, 209, ill. XVII/1–8), only a few pieces of crumb beads were discovered within one grave and this is the case in Transylvania as well. At Ernei both graves containing such beads were disturbed and therefore it cannot be excluded that further pieces could have been taken out.

Type A.II.4 Mosaic beads
Grave 43 (1)

The only mosaic bead of the corpus is, without doubt, the most complex from a technological point of view (see above). As mosaic beads are made by combining glass cane sections of different designs, the final decorative pattern shows a great variety. Thus, it is difficult to find exact parallels for the specimen discussed here.

Even if it is a unique piece, analogous finds in terms of the pattern's arrangement can be found in Late Imperial Age and Migration Period contexts. Of an almost identical design are the beads with interchanging checkerboard and stylized vegetal pattern of Olldag type 2408 (Olldag 1994, 207; = Alekseeva type 517: Alekseeva 1982, 44, Tabl. 49/35; TM group XXIII, type 367: Tempelmann-Mączyńska 1985, 22, Taf. 12/367a–b). But, while the alternating checkerboard and vegetal motifs are arranged in three identical stripes on Olldag type 2408, on the specimen from Ernei the vegetal motif is inserted only in the central stripe and is replaced on the edges by simple brick-red glass with yellow speckles. Beads of Olldag type 2408 are rather rare but were spread over a large geographical area. Only a few of them come from well-datable archaeological contexts; these suggest a period of use approximately between the 4th century and the early Migration Period (Selling 1942, 39–41; Olldag 1994, 234; for a dating mainly in phase D, see Tempelmann-Mączyńska 1985, 60–61). The closest analogy for the bead from Ernei comes from the northern Black Sea region, from Panticapaeum, included in Alekseeva type 513 and dated loosely in the 4th–6th centuries (Alekseeva 1982, 44, Tabl. 49/34). The two beads have almost identical designs, both in terms of composition and colour; the only difference is that the one from Panticapaeum has only brick-red glass without yellow speckles.

From the point of view of the decorative pattern, a more distant analogy is represented by the mosaic mask beads which have an identical arrangement of the decoration as the beads of Olldag type 2408, the only difference being that instead of the vegetal motif or the checkerboard pattern a human face is depicted (Selling type II: Selling 1942, 24; TM group XXIII, type 370: Tempelmann-Mączyńska 1985, 22, Taf. 12/370; Olldag type 2411: Olldag 1994, 207). Such beads occur also rarely, but again, on a vast territory: more densely in Scandinavia and the Baltic area, less frequently in Central Europe and on the territory of the Sântana de Mureș – Chernyakhov culture (Bemmann 2006, 221, Abb. 6; Grumeza 2022, 629). From a chronological point of view, these belong to the period between the middle of the 4th and middle of the 5th century (Olldag 1994, 236–237, Bemmann 2006, 221–222).

Mosaic beads of the mentioned types are extremely rare in Transylvania. Up to date, only one bead similar to Olldag type 2408 was discovered at Fântânele–*Rât*, grave 1, dated to period D1 (Marinescu – Gaiu 1989, 142, Abb. 2/A.18).

B. Metal beads

B.I. Beads made of sheet metal

Type B.I.1. Polyhedral metal beads

Graves 1 (2), 43 (5), 45 (6) and 47 (2)

A less usual, but relatively frequent type in the cemetery at Ernei (15 pieces in total) is the category of polyhedral beads made of metal sheet, probably silver. Most likely, these imitate the shape of the well-known polyhedral beads made of glass (type A.I.9), carnelian (type D), amber or other material, which were among the most common bead categories of both the Late Imperial Age and the Migration Period. Nevertheless, it is noteworthy that all the pieces from Ernei are rather small in comparison with the usual dimensions of their counterparts made of other materials.

Type B.I.2. Tubular metal beads

Graves 1 (1), 10 (1), 11 (1), 18 (1) and 22 (1)

Small-sized, simple beads of tubular shape made of metal sheet were found in five graves. Some of them are rather poorly preserved, mainly the one from grave 1. According to their size, the specimens from graves 10, 11 and 18 belong to the category of seed beads, two of them (graves 10 and 18) possibly imitating segmented beads. Similar beads can be mentioned e.g. from the late antique cemetery at Keszthely–*Fenékpuszta* (Müller 2010, 200–201, Taf. 7/5, 93/17). The larger bead from grave 22 is close both in shape and size to the monochrome cylindrical glass beads (type A.I.4).

Type B.I.3. Other shapes

Two of the beads made of metal sheet do not fit in either of the above categories. Unfortunately, both are very poorly preserved and their typological classification is therefore uncertain. The fragmentary bead from grave 22 probably had a globular form, similar to the specimens found in grave 76/78 at Tiszapüspöki (Masek et al. 2022, 132, no. 54), while the one from grave 45 was globular or flattened globular.

B.II. Spiral wire beads

Graves 9 (1) and 45 (2)

The items of this type are made of coiled metal wire, thus having a tubular form. As all three pieces were discovered in a secondary position, their interpretation as beads is not fully certain.

Coiled wire beads are extremely rare, but not unknown in contemporary cemeteries. Three short tubular beads made of gold wire are known from Viminacium, grave 2083 (type 112: Ivanišević et al. 2006, 100, fig. 70/209–211). During the 5th–first half of the 6th century, spirals made of metal, most often bronze wire, in combination with amber and glass beads, were rather popular on strings in the Baltic area, on the territory of present-day Lithuania, continuing former, Roman Age traditions (Bliujienė 2011, 213, fig. 73/5; 77/1; 78/4; 83/1; 86/2, 4; 87/10; 88/6; 89/3; 91/2). Beads made of coiled wire, but of double conical shape were published from grave 2 at Szihalom–*Budaszög*, dated to the beginning of the 5th century (Berecz et al. 2022, 357–358, 9. kép, 12. kép; with further references on this type).

Given the rareness of such beads in the closer geographical area, it cannot be ruled out that these were imitations of glass beads of similar shape and dimensions, predominantly of black colour, known already from the Sântana de Mureș – Chernyakhov culture (type XIII/2:

Gopkalo 2008, 32, Tabl. II/XIII.2) and mainly from the 5th–6th century (Viminacium type 102: Ivanišević et al. 2006, 97, fig. 70/153–161, with references).

C. Amber beads

C.I. Hand-carved amber beads

Type C.I.1. – Small and medium-sized rounded amber beads

Most of the amber beads discovered at Ernei belong to this type. They are characterised by a rounded shape and can be divided into subtypes according to the form of the section:

Type C.I.1.a – discoid/annular
Grave 43 (2)
Type C.I.1.b – truncated conical
Grave 10 (2)
Type C.I.1.c – irregular
Grave 43 (1)

Even though these can be correlated with separate types in the existing typological systems,[11] they represent formal variations of the same group and the differences do not bear chronological significance. Generally, amber beads of rounded shape were widespread both chronologically and geographically. Antecedents can be found in the Late Imperial Age, e.g. in Central Europe (Tempelmann-Mączyńska 1985, 65–67), on the territory of the Sântana de Mureș – Chernyakhov culture (Gopkalo 2008, 68–69) or in the North-Pontic region (Alekseeva 1978, 23–24). They were especially popular during the 5th and the first half of the 6th century, in certain regions reaching even the beginning of the 7th century. Their distribution area stretches from the Merovingian Gaul to Central Russia (for a comprehensive overview see Ivanišević et al. 2006, 59–61).

Such beads are relatively frequent on Transylvanian sites too. Examples can be mentioned from phase D1 e.g. from Fântânele–*Rât* (Marinescu – Gaiu 1989, 141–142, Abb. 2/14–15, 20), Archiud–*Hânsuri* (Gaiu 1999, 287, fig. XVIII/3–5) and Ernei–*Carieră*, feature G27 (Crișan – Lăzărescu 2010, 234–235, pl. 11/9), from the second half of the 5th century e.g. from the elite female grave at Turda (Bărbulescu 2008, 59–60, 159–160, pl./Taf. XI/3–4; XX/3), Cluj–*Cordoș* (Hica – Ferenczi 2006, 931–932, fig. 1/3, 8), Noșlac, grave 121 (Dobos 2012, 32–33, fig. 1/2.d) and the 6th century e.g. from Florești–*Polus Center* (Ferencz et al. 2009, 431–432, pl. V/1.b, l; XVI/8), Sighișoara–*Dealul Viilor* (Harhoiu 2015, 221, Abb. 7C/c.G12) and Morești (Horedt 1979a, 190). The above-listed specimens clearly show that the type was rather popular among the different communities in Transylvania between the Late Imperial and the Gepidic Ages.

Type C.I.2. – Large-sized rounded amber beads
Grave 48 (1)

The only bead included in this category has a slightly irregular discoid shape. From a morphological point of view, it is tightly connected to the previous type, the main difference consists

[11] Type C.I.1.a = TM group XXX, types 388–389 (Tempelmann-Mączyńska 1985, 24, Taf. 15/388–389), Viminacium type 2 (Ivanišević et al. 2006, 59, fig. 65/2–4), Gopkalo type I/1 (Gopkalo 2008, 68, Tabl. VIII/I); type C.I.1.b = TM group XXXV, type 402 (Tempelmann-Mączyńska 1985, 24, Taf. 15/402a–b), Viminacium type 3 (Ivanišević et al. 2006, 59, fig. 65/7), Gopkalo type III/1 (Gopkalo 2008, 68, Tabl. VIII/III).

in its much larger diameter (45.2 mm). The chronological and geographical distribution is also identical (Kazanski – Mastykova 2003, 164–166); however large beads are much less numerous than their small and medium-sized counterparts, and generally, only one specimen occurs inside one assemblage. In Transylvania three such beads are known from different chronological sequences: one from feature G27 at Ernei–*Carieră*, dated to phase D1, which probably was the central piece of a string of beads (Crişan – Lăzărescu 2010, 234, pl. 11/8; 12/1), one from the second half of the 5th century, discovered in the elite burial at Turda, possibly suspended on one of the brooches (Bărbulescu 2008, 59, 159, pl./Taf. XI/1–2; XX/3) and one from the yet unpublished Gepidic Age cemetery from Topa Mică, likely with similar functionality as the bead from Ernei.

C.II. Lathe-turned amber beads

Type C.II.1. – Small and medium-sized amber beads with incised linear decoration

All the lathed amber beads discovered at Ernei belong to this category. They have more or less rounded shape with different sections and are decorated with one or two concentric incised lines. The beads included in this category can be further subdivided according to their shape:

Type C.II.1.a – annular
Grave 9 (1)
Type C.II.1.b – flattened globular
Grave 66 (1)
Type C.II.1.c – truncated conical
Grave 43 (1)
Type C.II.1.d – biconical
Grave 43 (1)

Similarly to type C.I.1, the different subtypes[12] do not have any particular significance in terms of chronology or distribution. Beads with incised linear decoration, known also as 'Basonia type' in the archaeological literature (Bliujienė 2011, 218), occurred as early as the B2/C1 chronological phase (Tempelmann-Mączyńska 1985, 77) and during the Late Imperial Age were spread mainly on the area of the Wielbark culture (Mastykova 2001, 341; Kazanski – Mastykova 2003, 167; Ivanišević et al. 2006, 62).

A wider diffusion took place in the Migration Period. During phases D1–D3 such beads were especially popular in the Middle Danube region, where the latest specimens can be dated no later than 470/480 (Mastykova 2001, 341–345; Ivanišević et al. 2006, 62) and in the South-Baltic area (Mastykova 2001, 345–349; Bliujienė 2011, 221). Such beads are known to a much lesser extent from other areas of Europe, for instance in Scandinavia, Western Europe, the North-Caucasus region and Abkhazia. This distribution pattern determined Anna V. Mastykova to consider the amber beads with linear decoration part of the so-called 'Danubian fashion' and their spread in Western and Eastern Europe as a result of migration of different Eastern Germanic communities (Mastykova 2001, 349, 353; Kazanski – Mastykova 2003, 63).

Evidence for the production of amber beads with linear decoration was documented at Świlcza in South Poland, respectively at Basonia in East Poland, both dated to period D, a fact

[12] Type C.II.1.a = Viminacium type 5, Bliujienė type VI/33; Type C.II.1.b = Bliujienė type VI/38; Type C.II.1.c = Viminacium type 6, Bliujienė type VI/47–49 (see Ivanišević et al. 2006, fig. 65/10–14; Bliujienė 2011, fig. 68/VI.33, 38, 47–49).

that demonstrates the trade with raw amber processed far away from the source (TEMPELMANN-MĄCZYŃSKA 1985, 77, Abb. 12; MASTYKOVA 2001, 345; BLIUJIENÉ 2011, 218, fig. 71, all with further references). Taking into account that no closer workshop has been identified to date, the beads from the Middle Danube region might have been manufactured in the mentioned area.

Despite the relatively high frequency of such beads in the larger area, only one specimen can be cited from Transylvania, from grave 1 at Fântânele–*Rât*, dated to phase D1 (MARINESCU – GAIU 1989, Abb. 2/19). In light of this information, the four occurrences of this type at Ernei are somewhat surprising and, at the same time, a precious chronological indicator.

D. Carnelian beads

Grave 11 (1)

The only bead made of carnelian was discovered in grave 11 and has a polyhedral shape with a flattened section. It belongs to a widespread type (TM group LVII, type 499: TEMPELMANN-MĄCZYŃSKA 1985, 26, Taf. 19/499a–b; Alekseeva type 15: ALEKSEEVA 1982, 17–18, Tabl. 39/21–24; Gopkalo type 1: GOPKALO 2008, 74–75, Tabl. IX/V.1, Viminacium type 17: IVANIŠEVIĆ ET AL. 2006, 67–69, fig. 66/27–29) which, from a morphological point of view, is strongly related to glass beads of similar shape (type A.I.9).

The polyhedral carnelian beads of the Migration Period can be traced back to Roman Age roots. On the territory of the Empire, they occur mainly in late Roman burials, first of all in Pannonia with a dating after the middle of the 4th century (MARTIN 1991, A, 32, note 158) and, to a lesser extent, in the western provinces, e.g. in Britannia or at Kaiseraugst (MARTIN 1991, A, 32–33; KAZANSKI – MASTYKOVA 2003, 156, IVANIŠEVIĆ ET AL. 2006, 68). Similarly, they can be found in 4th-century contexts in the Lower Danube region, for example in the cemeteries at Callatis (PREDA 1980, 59–60) and Béroé (PETRE 1987, *passim*, pl. 159/V.3).

Polyhedral carnelian beads were more popular in the Barbaricum during the Late Imperial Age, mainly in the area of the Wielbark and the Sântana de Mureș – Chernyakhov culture (KAZANSKI – MASTYKOVA 2003, 153, IVANIŠEVIĆ ET AL. 2006, 67–68; GOPKALO 2008, 74–75) as well as in the Sarmatian milieu (VADAY 1989, 104, Abb. 24/11–12; GRUMEZA 2014, 101, fig. 34/3). Their dating is similar to the ones made of glass, the earliest specimens coming from the second half of the 2nd century AD (TEMPELMANN-MĄCZYŃSKA 1985, 89; GRUMEZA 2014, 101). A similarly early date of occurrence was documented for the northern Black Sea region (ALEKSEEVA 1982, 17–18). On the territory of Roman Dacia such beads were produced in the workshop at Tibiscum, which probably supplied the Sarmatian Barbaricum (BENEA 2004, 95, 221–222, Taf. III/Karneol Perlen).

To a lesser extent, such beads are attested in the Migration Period as well (see IVANIŠEVIĆ ET AL. 2006, 68). In Transylvania these are known mainly from period D1, e.g. at Archiud–*Hânsuri* (GAIU 1999, 287, fig. XVIII/6–15) and Ernei–*Carieră* (CRIȘAN – LĂZĂRESCU 2010, 235, pl. 11/12–13).

E. Bone beads

Grave 45 (1)

Only one fragmentary item was discovered in grave 45. It most probably had a discoid shape with rounded edges, similar to TM group LIX, type 511, dated in the last phase of the Late Imperial Age and the Migration Period (TEMPELMANN-MĄCZYŃSKA 1985, 90, Taf. 20/511).

VI.1.b. Brooches (Márton Ferenczi)

Only two of the 70 graves in the Ernei cemetery contained brooches. This low number is certainly related to the high degree of grave disturbance. Grave 22 contained a cicada brooch, while a pair of bow brooches was found in the only undisturbed grave (no. 43).

Cicada brooch

The only cicada brooch was recovered from the disturbed grave 22 (Pl. 12/22.8; 43/11). Although an anthropological sex determination was not possible, the beads recovered together with the cicada point towards a female grave. Due to its secondary position, it is not possible to determine the way how the brooch was worn, nor whether it was worn in pair or alone.

The origins of the cicada brooches and of the cicada motif in general, are still unclear (for the main theories of origin with detailed research history, see Kisné Cseh – Prohászka 2002, 114–117; Tejral 2011, 190–192; Tejral 2015, 309–310; for the possible symbolic meanings of the cicada, see Kysela 2002; Wiśniewska 2019, 177–179). Early interpretations traced the Migration Period cicada brooches to Asia. In the first comprehensive review, Herbert Kühn (1935) argued for their Chinese roots and assumed a Sarmatian mediation in their spread. In his typology, Burchard Brentjes (1954) was the first to differentiate between Roman and Migration Period forms. The frequent occurrence of Roman specimens in Pannonia raised the possibility that this insect motif originated from the Pannonian Celtic tribes and was adopted by the Romans (Kysela 2002, 22; Tejral 2011, 191–192). These Imperial Age cicada brooches are characterised by a triangular, pointed insect body. The wings are marked by a single- or double-line meeting at an acute angle; grooves separate the head from the body (Tejral 2015, 310–311).

Beginning with the 5th century, new types of cicada appear in the archaeological material, which are clearly different in shape compared to the earlier Roman provincial variants (Tejral 2015, 312).[13] Jewellery imitating the cicada was a popular item of clothing in the Hun Age and the period immediately after. Grave finds show that such items were worn on clothes mainly by women and children, either singly or in pairs (Kisné Cseh – Prohászka 2002, 116; Kysela 2002, 22; Wiśniewska 2019, 177). They were cast in bronze or silver, but there are also examples made of solid gold or over-plated with gold and decorated with gems (Rácz – Szenthe 2015, 377). The most widespread shape of the period is the so-called 'three-winged' type, resembling a flower petal, which can be found in the Black Sea region as well as in Eastern Europe (Kisné Cseh – Prohászka 2002, 120).

The gilded silver specimen discovered in grave 22 in Ernei belongs to the group of the above-mentioned 'tripartite' or 'three-winged' cicada brooches of the 5th century. By contrast to the earlier Imperial Age variants, these are characterised by a more prominent abdomen. Enclosed by two wings, it is the abdomen that forms the third 'wing'. Their geographic distribution covers a wide area, occurring most frequently in the Central Danube region and the Crimea, and less frequently in the Baltic Sea region and Eastern Europe (Tejral 2015, 313–314; Wiśniewska 2019, 177, fig. 4). The design of the head and neck varies; Jaroslav Tejral has therefore based his groups identified within the type primarily on the shape of the body. In this subdivision, the brooch from Ernei is classified as a straight-winged variant (Tejral 2015, 314).

From a morphological point of view, the closest analogies of the brooch are found in the Middle Danube region in Dunaújváros (Visy 1981, 211, 3. kép/1–2, 4. kép/1–2), grave 17/1955 from Šarovce (Tejral 2015, Abb. 12/9), a presumably miscast item at Bojná II site (Tejral 2015,

[13] István Bóna's hypothesis states that, unlike the other fibulae, the cicada brooches are part of the 'non-Germanic' fashion of the Hun period, which may have originated from the Greek-Sarmatian-Alan women's clothing of the Black Sea region, and may have spread from there with the Hun migration (Bóna 1991, 196–197).

309, Abb. 12/11), and at Orašje-Dubravica (Margus) (Vinski 1957, 140, Abb. 16). The form of the three-winged bodies of these specimens is similar to the one from Ernei. In all likelihood, the fragmentary specimens from Császár (Kisné Cseh – Prohászka 2002, 113, 2. kép) and grave 2 at Velika Bakta in Transcarpathia (Čerkun 1994, 93, ris. 5/2) also belong to this variant.

Geographically more distant analogies can be mentioned from the Baltic area, in Wydryny (Wiśniewska 2019, fig. 3/2a–b), from grave 189/2007 in Almalyk-Dere in the Crimea (Mączyńska et al. 2011, 160, fig. 12/1–2), and from Ksizovo, sites 8 and 19 in the Don region (Gavrituchin 2015, 213, ris. 5/21; 233/1) (Fig. 24).

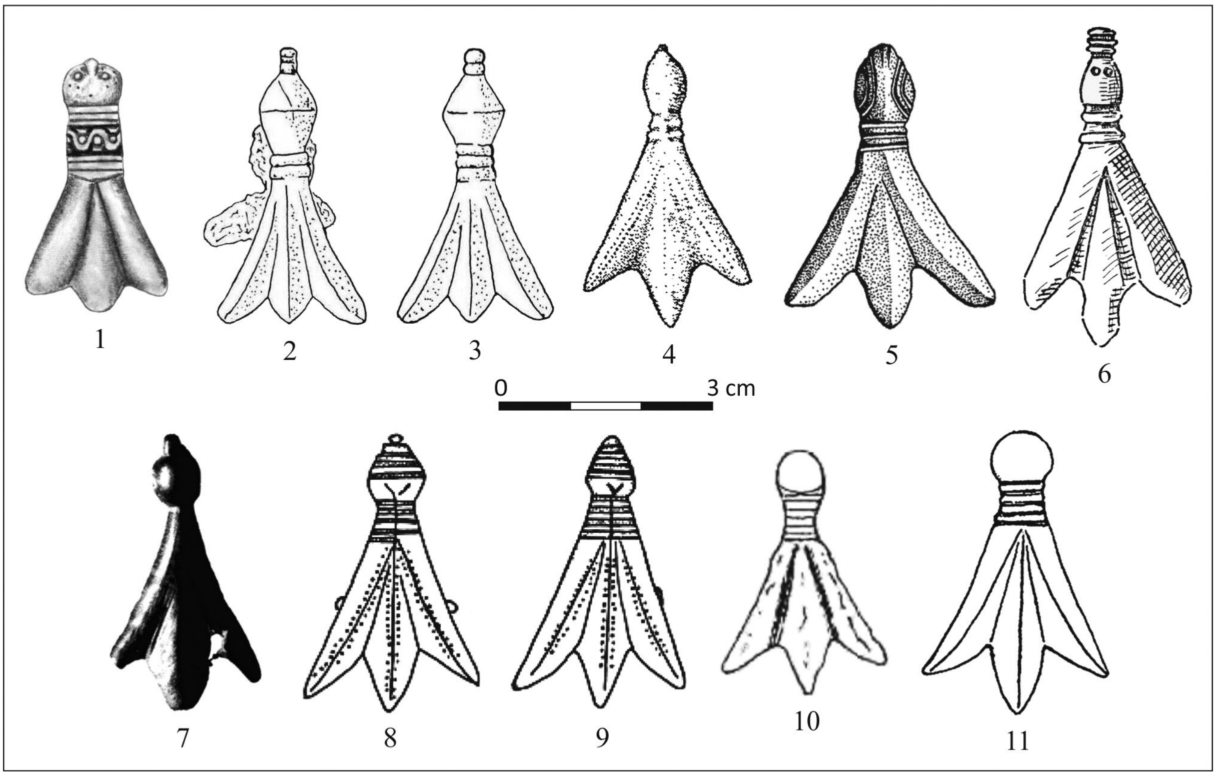

Fig. 24. 'Three-winged' cicada brooches with straight or slightly curved wings: 1. Ernei–*Köles-kert*, grave 22; 2–3. Intercisa, female grave (after Visy 1981, 3. kép/1–2); 4. Šarovce, grave 17/1955 (after Tejral 2015, Abb. 12/9); 5. Bojná II (after Tejral 2015, Abb. 12/11); 6. Margus (after Vinski 1957, Abb. 16); 7. Wydryny (after Wiśniewska 2019, fig. 3/2a); 8–9. Almalyk-Dere, grave 189/2007 (after Mączyńska et al. 2011, fig. 12/1–2); 10. Ksizovo–8 (after Gavrituchin 2015, ris. 5/21); 11. Ksizovo–19 (after Gavrituchin 2015, ris. 233/1).

Besides the specimen from Ernei, three cicada brooches are known from Transylvania. From a typological point of view, the one from Alba Iulia (Harhoiu 1998, 157, Taf. XC/B), belonging to the group of large bronze cicada brooches of the Late Roman period (for a detailed discussion on the type, see Kisné Cseh – Prohászka 2002, 118; Tejral 2015, 310–312), is the least related to the one from Ernei. The geographically very close (ca. 5 km) brooch from Dumbrăvioara (Hampel 1905, II, 7–8, III, Taf. 9/3a–c; Harhoiu 1998, 174, Taf. XC/C) represents an earlier variant than the one from Ernei, where the plastically prominent body and the triangularly tapering short abdomen show the continuation of earlier Imperial Age traditions (Tejral 2015, 312). The gold cicada brooch of high technical standards can be dated to the 'classical' Hun period, i.e. to chronological phase D2, based on the Untersiebenbrunn – Coșoveni-style punched decoration (Tejral 2011, 194; Tejral 2015, 312; Harhoiu 2021, 31). Typologically, the Transylvanian specimen closest to the Ernei fibula is the tripartite brooch discovered at Florești–*Polus*

Center, which represents another variant of the type with the wings strongly curved outwards (Lăzărescu 2019, 100, fig. 14/i).

As mentioned earlier, one of the main distribution areas of 'three-winged' cicada brooches is the Central Danube region. Within this area, a significant concentration can be observed north of the Danube, suggesting a local production (Tejral 2015, 313, 315, Karte 4). This assumption is supported by the semi-finished brooch recovered from the depot find of Buschberg–*Steinmandl* in Lower Austria (Szameit 1997, 236, Taf. 5/4) and probably also by the already mentioned specimen from Bojná. Based on the accompanying finds, their dating in the Central Danube region corresponds mainly to the chronological phases D2/D3–D3 (Tejral 2015, 316–319).[14] According to Tejral (2015, 314), the specimens with straight or very slightly curved wings, where the brooch from Ernei belongs, represent a transitional variant and are thus slightly earlier than those with strongly curved wings.

The relatively early dating of the cicada brooch from Ernei seems to be also supported by the design of the head. Regardless of the shape of the wings, the head of the 'three-winged' specimens is usually simple, mostly spherical or elongated, with the eyes hardly ever marked, and even then schematically represented.[15] The nose is marked even rarer; in this respect there is some similarity with the schematically articulated head of the fibula pair from Kistokaj (Bóna 1991, Taf. 40/3). The design of the eyes is mainly analogous to some Hun Age specimens, which usually represent the eyes with a round inlay.[16] In this respect, the brooch from Ernei is closest to the one from Dumbrăvioara, on which only the eyes are depicted through a pair of protruding almandine inlays, while a vertical band of notched decoration marks the nose. Given the proximity of the two sites, one cannot rule out the possibility that the latter could have served as model for the eyes of the cicada from Ernei.

Based on the above, the cicada brooch from Ernei is probably an early piece of the 'three-winged' type and can be considered a unique specimen of the group. The inlaid eyes, which are probably inspired by earlier examples, the careful design of the head and especially of the long neck, as well as the gilded surface of the brooch make it one of the most elaborated and technically sophisticated examples of the 'three-winged' cicada brooches.

Bow brooches

The brooches in grave 43 were located on the right shoulder of the skeleton and next to the left clavicle respectively (Fig. 20; Pl. 23/43.1), suggesting that they were used for fixing a garment on the shoulders (for more details, see Chapter VII). The main features of the two silver-cast gilded bow brooches are the three-buttoned semicircular headplate decorated with a pair of chip-carved tendril motifs; the wide, articulated bow; the footplate decorated with concentric rhombuses, and the termination representing a stylised animal head (Pl. 26/43.1–2; 42/1–2).

According to Kurt Horedt, the group of small bow brooches with three buttons similar to the ones found in grave 43 are dated in Transylvania from the second half of the 5th century to the first quarter of the 6th century (Horedt 1986, 25); however, their use is most common in the second half of the 5th century (see e.g. Harhoiu 1998, 102–103; Tejral 2008, 258).

[14] Their use in the Crimea comprises a longer period (broadly speaking, mid/second half of the 5th century – mid/second half of the 6th century) (Gavrituchin 2015, 214).

[15] E.g. two dots mark the eyes on the aforementioned brooch from Margus. Somewhat more detailed are the specimens from Bojná II, from grave 14/1914 in Chersonesos (Jakobson 1959, 270, ris. 134/6), from Novoselo in Kaliningrad (Rudnicki – Skvortsov 2018, 380–381, rys. 1) or the one from Szilvásvárad–*Lovaspálya* (Gulyás et al. 2019, 433–437, fig. 2/5, 4/2).

[16] E.g. Kerč, graves from 1904 (Zasetskaya 1993, 54, Tab. 23/92); Györköny (Hampel 1905, II, 7, III, Taf. 9/1a–b; Bóna 1991, 286, Farbtaf. XXV); Csömör (Hampel 1905, II, 7, III, Taf. 9/2; Bóna 1991, 297, Taf. 95).

The ornamentation of the brooches from Ernei with volutes on the headplate and concentric rhombuses on the footplate is one of the most common decorations on chip carved brooches. Items with three buttons are known from Szentes (153 Rákóczi út) (Csallány 1961, 66, Taf. XI/10), grave 88 in Kiszombor (Csallány 1961, 177, Taf. CXXXIV/2), grave 6 at Nyíregyháza-*Csorda-Páskum II.*, M3–58 site (Beck et al. 2021, 120, 10. kép/6, 18. kép), Jobbágyi (Kiss 1981, 167, Taf. I/7), Tiszaug (B. Tóth et al. 2022, 168–169, nos. 148, 150) as well as Sikenica-Velký Pesek (Tejral 2008, Abb. 2/21–22).[17]

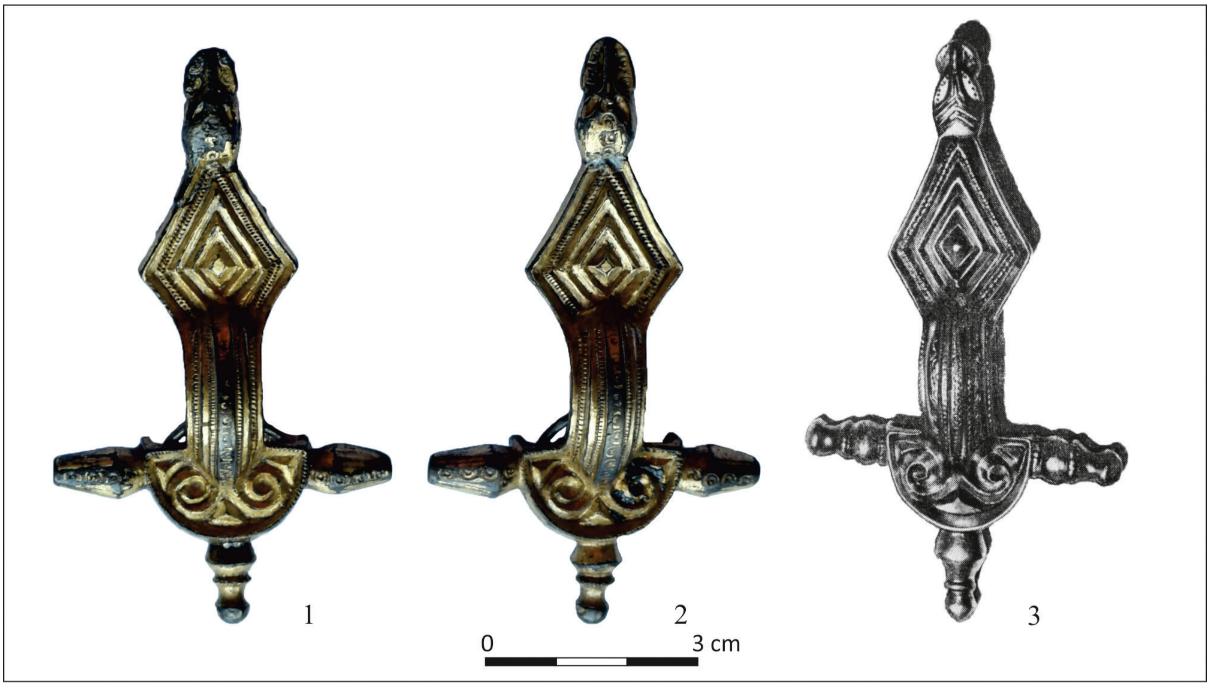

Fig. 25. Gilded silver bow brooches with chip-carved decoration: 1–2. Ernei–*Köles-kert*, grave 43; 3. Chersonesus (after Ajbabin 1979, ris. 4).

The brooches listed above are closely related in terms of structure, decoration and execution. The specimens from Ernei are similar to a certain extent, but important differences can also be identified. The latter are much more elaborate both in form and decoration: the side buttons are punched, the bow and footplate are wider and their decoration more intricate, the animal head is more detailed. There is also a difference in size: while the length of the specimens listed is around 60 mm, that of the brooches from Ernei exceeds 80 mm. These observations suggest that the items from Ernei are among the most elaborate ones of the period, and may have served as prototype for simpler versions.

Nevertheless, the best parallel for the pair of bow-brooches from Ernei was discovered not in the Middle Danube region, but in Crimea, at Chersonesus. Unfortunately, the brooch is a stray find from the territory of the necropolis, and therefore it cannot be dated more tightly. It is made of gilded silver and its structure, dimensions (82 mm length) and decoration correspond with the brooches from Ernei. There are only minor differences in the shape of the buttons, the

[17] Apart from these finds, the combination of spiral decoration and concentric rhombuses also appears on other small-size bow brooches with three buttons, which are less similar to the Ernei specimens, but are related to them. Such items are known in Transylvania from the female grave in Slimnic (Glodariu 1974, 484, Abb. 2/4–5), or from Căpușu Mare (Dobos 2009, 232, fig. 9–10). Likewise, it appears on a well-defined group of later, larger, five-buttoned brooches, which, based on the best quality specimen from grave no. 16 at Szolnok-*Zagyva part*, were dated by János Cseh (2005a, 27) to the end of the 5th century.

decoration of the bow and the animal head (Fig. 25). Due to its morphological characteristics and the high technological quality, the brooch from Chersonesus was dated in the second half of the 5th century and considered to originate from the Middle Danube region, which later could have served as a prototype for the Crimean masters (Ajbabin 1979, 23–27, ris. 3/1–1a; 4; see also Gavrituchin – Kazanski 2010, 105–106, fig. 4.15/30).

Based on the above, it seems plausible that both the brooches from Ernei and the one from Chersonesus are among the earliest specimens of chip-carved bow brooches. Due to the high degree of similarities, it is likely that they were produced in the same geographical area (even the same workshop or goldsmith cannot be excluded), probably in the Middle Danube region, and represented a source of inspiration in the production of simpler brooches of lower quality, but similar morphological traits.

VI.1.c. Pin (Márton Ferenczi)

The only pin was recovered in fragmentary condition from the undisturbed female grave 43 (Pl. 26/43.3). The interpretation as a veil pin of the simple, undecorated silver specimen is suggested by its position on the lower part of the skeleton's right clavicle (Fig. 20; Pl. 23/43.1). It was presumably used to fasten a garment fixed under the neck (see Chapter VII).

VI.1.d. Bracelets (Márton Ferenczi)

Bracelets were discovered in two graves (9 and 43) in Ernei. The child burial 9 concealed the fragment of a bracelet made from an 8 mm wide and 1 mm thick silver plate and the larger part of a bracelet made from a 3 mm wide and 1 mm thick silver plate (Pl. 5/9.2). Bronze objects similar to the silver plate fragments were found in the grave marked I in the Magyarcsanád–*Bökény* cemetery (Csallány 1961, 139, Taf. CCLVIII/9) and in the child grave 118 of the Gepidic Age cemetery at Kiszombor (Csallány 1961, 179, Taf. CXXVII/20–21).

The female grave 43 contained a pair of bracelets cast in silver, decorated at the thickened ends with 5 punched motifs each of lines-and-dots and a 2 mm thick gold plate overlay (Pl. 27/43.1–2; 42/5–6). Bracelets with thickened ends were generally popular in the 5th century (Rácz 2016, 312). They were made less frequently of gold, more often of silver and bronze. They occur both in pairs and alone and are mostly unornamented. In Transylvania undecorated bracelets cast in silver come from grave 1/1964 in Bratei (Bârzu 1986, 95–96, fig. 2/10–11, 3/10–11; Harhoiu 1998, 167, Taf. LXXXIX/A.6–7), and a bronze specimen was recovered from grave Cx. 41B at Florești–*Polus Center* (Ferencz et al. 2009, 453, pl. XVI/7). A gold bracelet was found in the grave at Cepari, dated by a coin of Theodosius II (Protase 1960, 571, Abb. 3/2, Abb. 4/2; Harhoiu 1998, Taf. XCI/H.3). A few pieces are known east of the Transylvanian Basin, from the grave finds in Valea Lupului and Secuieni (Harhoiu 1998, 186, 193, Taf. LXXV/B, A.1–2).

Compared to the above parallels, the gold-plated and dot-decorated ends of the bracelets found in Ernei reflect the multi-layered technical skills of their manufacturer. The widening ends were decorated in several cases, mostly with parallel notched lines (e.g. Smolín, grave 32: Tejral 1973, 35–36, Abb. 5/11; Laa a. d. Thaya, grave 1: Beninger 1929, 146, Taf. XVIII/6–7; Wien-*Atzgersdorf*: Prohászka 2006, 393, 1. ábra/3; Miszla: Szendrey 1928, 223, VII. tábla/7–8; Zsibót-*Domolospuszta*: Dombay 1956, 115, XVII. tábla/1–2; Mád: L. Kovrig 1951, 114, XLV. tábla/6; Mezőkövesd-*Mocsolyás*, grave 2: Lovász 2005, 52, Taf. 30/11–12, 87/3–4; Singidunum, grave 8: Ivanišević – Kazanski 2002, 128, pl. II/8.2). They are similar in appearance to the specimens from Ernei, but the parallel lines on the latter objects are formed by punched lines of

dots, a less frequently used technique. A similar procedure was used to decorate the cast silver bracelet from grave 1976/2/5 in the cemetery situated in the front of the southern wall of the Keszthely–*Fenékpuszta* fortress, which, in addition to the lines of dots, also has a punched fish scale-like decoration (Straub 2011, 337, Abb. 2/2, Taf. 1/5.7).

Bracelets with thickened ends were common among Early Migration Period peoples; their dating is generally indicated by their context. In the present case, they can be dated after the middle of the 5th century AD, based on the bow-brooches found in the same grave.

VI.1.e. Fingerrings and earring (?) (Márton Ferenczi)

Only three rings were discovered at Ernei, all of them recovered from disturbed graves of children. A simple, undecorated ring of silver plate with a diameter of 23 mm was found in grave 6 (Pl. 3/6.3), a ring fragment of silver plate in grave 45 (Pl. 21/45.2) and a spiral-shaped, unornamented ring of silver plate in grave 11 (Pl. 8/11.5).

A peculiar shape is that of the spiral ring of grave 11, a relatively rare type in the period. Its parallels in gold are known from Répcelak (Kiss 2001, 120, Abb. 5/3, Abb. 9/2) and Szécsény (Csallány 1961, 238, Taf. CCLI/3), while silver specimens were found in grave 1/1964 in Bratei (Bârzu 1986, 97, fig. 2/4, 3/9; Harhoiu 1998, 167, Taf. LXXXIX/A.8), and bronze ones in Csorna (Hampel 1905, I, fig. 1213), Vajuga, grave 18 (Popović 1987, 130. Taf. 5/4), Mitterhof, grave 3 (Heinrich 1990, 88, Taf. 2/7) and Szekszárd-*Palánk*, grave 217[18] (Kiss 1996a, Abb. 8/10). Despite the small number of analogies, the associated finds date the type relatively well to the D2/D3–D3 chronological phase, broadly speaking to the middle–third quarter of the 5th century.[19]

Due to the high degree of grave disturbance, no additional data is available on the rings. In the case of grave 11, the analysis of the skeletal material and grave goods yielded conflicting results. The grave, identified on the basis of the preserved teeth and jaw as belonging to a 5–7 years old child, concealed a 23 mm diameter ring (a larger fragment of a knuckle surviving inside it), suggesting that it was a piece of jewellery worn by adults.

A polyhedron-shaped button was found in the fill of the reopening pit of grave 11, with a silver wire introduced in its pierced centre (Pl. 8/11.2). The latter has been preserved only in fragments, so its shape cannot be reconstructed. It might have been part of an earring; however, unlike the earrings of the same type of the period,[20] the undecorated polyhedron ending is made of quartzite.[21]

Polyhedral earrings are typical of the Migration Period, and were widespread mainly in Central and Eastern Europe. Massive polyhedron-ended earrings appeared already in the late 4th century in the late Roman cemeteries of Intercisa and Csákvár, and became popular among various barbarian peoples during the 5th century, with their use extending into the 6th century (Horedt 1979b, 246; Ferencz et al. 2009, 430). However, the type also appeared in the Caucasus region in this early period, so opinions are divided regarding its origin: while some scholars

[18] In the case of the Szekszárd ring, it is not entirely certain that it was made of bronze (Kiss 1996a, 61).

[19] The chronologically most representative grave good of the burial from Répcelak is the pair of chip carved brooches, considered a characteristic find of phase D3 (see Bierbrauer 1995, 572–573; Kiss 2001, 126–127, 134). The ring from grave 217 at Szekszárd-*Palánk* was found, among others, with a pair of Szekszárd – Sokolnice type brooches (for the type's chronology, see Bierbrauer 1995, 575; Kiss 1996a, 59; Nagy 2005c, 181), while the ring from grave 3 at Mitterhof was accompanied by a Prša – Levice type brooch (for dating, see Werner 1959, 431; Heinrich 1990, 95; Harhoiu 1998, 102). The Bratei grave can be dated to the middle of the 5th century (Bierbrauer 1995, 577; Harhoiu 1998, 155).

[20] The button on polyhedron-ended earrings is usually made of solid silver, bronze or, less often, gold.

[21] The material was identified by Alexandru Solomon (Mureș County Museum).

emphasise a late Roman origin, others agree on a barbarian source, and explain the spread of the type in the Danube region by various ethnic movements.[22]

The polyhedral earrings are widespread throughout the Carpathian Basin, but according to available data, the version with massive button (Horedt type A: Horedt 1979b, 241, Abb. 2) of the Gepidic Age are more common in Transylvania (Cseh 1990, 30; Ferencz et al. 2009, 430).[23] They are made of a wide variety of materials, including gold, silver and bronze. The hoops of the earrings are predominantly plain and unornamented; occasionally an incised decoration may occur. The button is also rarely decorated, with a few known cases of dots-and-rings (Horedt 1979b, 242).

Besides earrings, solid polyhedron-headed pins also occur in the Early Migration Period finds, albeit in significantly smaller quantities. These may have been used as hairpins or clothes-pins and, similarly to earrings, were made of metal (for more details on the type, see Quast 2005, 264–267). In Transylvania a pair of gold pins was found in grave 1/1964 in Bratei (Bârzu 1986, 96, fig. 2/3, 3/5–6; Harhoiu 1998, 167, Taf. LXXXIX/A.4–5). The fragmentariness of the object from grave 11 in Ernei does not completely exclude the possibility that it was originally the head of a pin.

As a last possible interpretation, one may consider the object as a bead, given its material and the fact that the polyhedron-shaped button is pierced through its entire length and a silver thread runs through it. Beads of similar shape, mostly made of glass and less frequently of other materials (e.g. carnelian, amber), are common finds from the Late Imperial and Early Migration periods (Tempelmann-Mączyńska 1985, 37–38, 129–130).

Despite the many similar examples, the identification of the Ernei object remains uncertain. At the same time, it is unique in that its material is a rarely used one.

VI.1.f. Buckles (Márton Ferenczi)

Out of the 70 graves of the cemetery from Ernei 16 contained buckles, 32 pieces in total: 17 were made of silver, 5 of copper alloy, 8 of iron and 2 of bone. In several cases more than one specimen was discovered in the same grave (1, 25, 43, 46, 48, 63), which can be explained by the many different purposes they could serve (belt buckles, purse buckles, footwear, sword belt buckles etc.). Given the high percentage of reopened graves, it is difficult to determine the function of the buckles, as they were usually found in secondary position. It is their size that can be a clue in this matter to a certain extent.

Buckles without plate (Fig. 26–27)

The vast majority of buckles are simple, round, oval or kidney-shaped specimens without a buckle plate. They are made mostly of silver, with a smaller number of iron and copper alloy variants.

A large proportion of the silver and copper alloy buckles (12 and 2 respectively) are small, simple specimens, without plate and less than 20 mm wide (Fig. 26/rows 1–4). Their main characteristic is the oval or rounded buckle ring, which may be thickened on the side where the tip of the tongue was situated. In some cases (graves 1, 31 and 40) the base of the tongue is rectangular and decorated with notched lines (Fig. 26). Their size made them suitable for narrow straps, so their use as belt buckles is unlikely. Three such items were found in the undisturbed grave

[22] For the different theories of origin, see Heinrich 1990, 92–94; Dobos – Opreanu 2012, 18–19; Tejral 2015, 321–323 (all with further references).

[23] For their distribution in the area, see Horedt 1979b, Abb. 3, 247–249, Fundliste 1/A, 2; Cseh 1990, 53, 16. lista, XVI. térkép.

43, two of which were located at the upper end of the shinbone and one on the left ankle (Pl. 23/43.1), clearly defining them as footwear buckles. Similarly, in the partially disturbed grave 63, two small buckles were located east of the tibiae (Pl. 38/63.1), supporting their function as shoe buckles. The situation is not so clear in the case of other graves. Two copper alloy specimens were found in grave 25 (next to each other). It is only their appearance in pairs that suggests a footwear-related use, but other functions (e.g. attachment of side straps, purse-locking) cannot be excluded either. The buckle from grave 1 was located in the middle of the grave, on leather remains (Pl. 1/1.1), substantiating its use as a purse buckle.

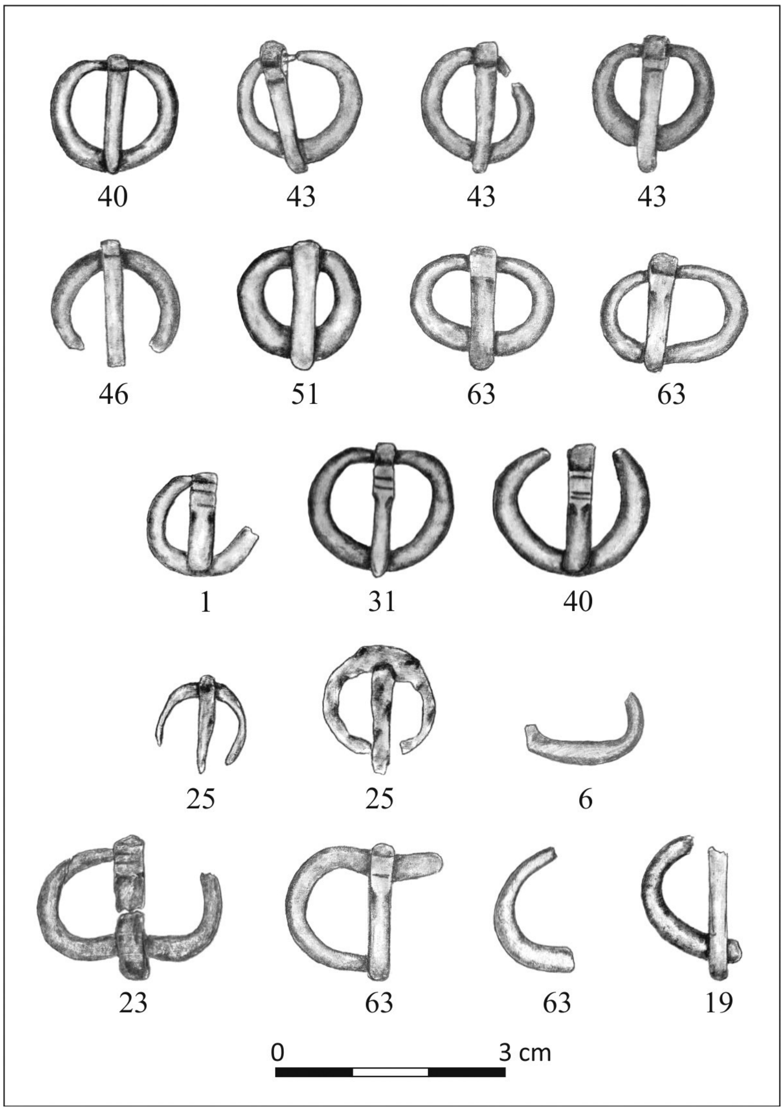

Fig. 26. Silver (1, 6, 19, 23, 31, 40, 43, 46, 51, 63) and copper alloy (25) buckles without plate.

Slightly larger buckles without plate come from graves 19, 23 and 63 (2 pieces) (Fig. 26/bottom row). Of these, the piece from grave 19 is oval, while one of the buckles from grave 63 and the one from grave 23 is kidney-shaped (the second buckle from grave 63 is too fragmentary to be reconstructed). Judging by their size, they may have been used as belt buckles, but their secondary position in the grave makes this interpretation uncertain. According to some opinions, the type of the kidney-shaped buckle can be traced back to the pieces with plate known from late Roman graves; however, starting from the end of the 4th century AD, it was also widespread in the southern Russian steppes (Pintye 2018, 297). In the 5th century, it was a characteristic type

in the Carpathian Basin too, with both non-ferrous and iron as well as simple and decorated variants (B. Tóth 2010, 193–196, with further references).

None of the iron buckles is provided with plate (Fig. 27), the vast majority of them being larger in size (graves 1, 11, 25, 46 – 2 pieces, 53, 63), which suggests that at least some of them were used as belt buckles. The smaller size of the specimen recovered from grave 59 suggests that this may have had a different function.

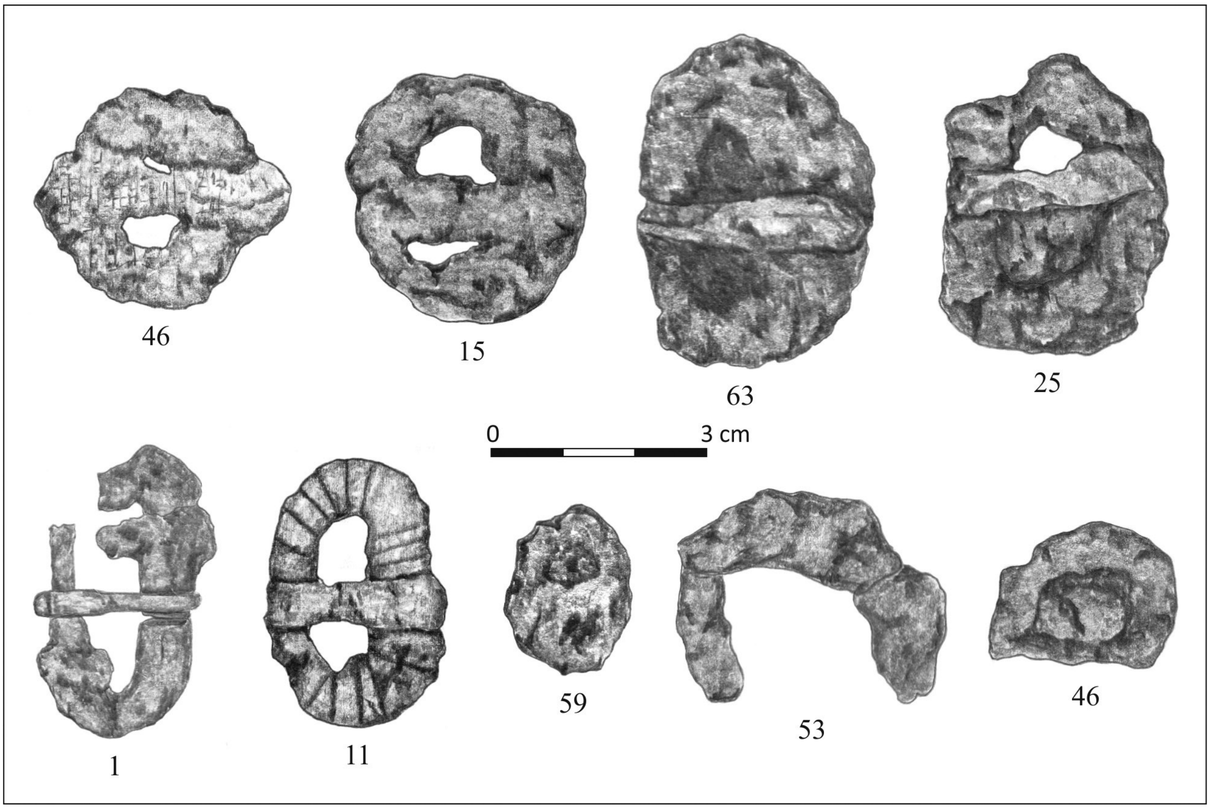

Fig. 27. Iron (1, 11, 25, 46, 53, 59, 63) and copper alloy (15) buckles without plate.

Most of the iron buckles can be classified as oval, with the exception of the round one from grave 46. The copper alloy specimen from grave 15 also belongs to the latter type (Fig. 27). Due to the simple design, the exact dating of both variants is possible only by means of other grave goods. The object type itself appeared in the Germanic environment in the 4th century and spread in the second half of the 5th century. They are known in a large number from the Gepidic Age cemeteries (Beck et al. 2021, 136). In the closer area, a similar buckle from the 5th century was found at Sângeorgiu de Mureș–*Kerekdomb* (Dobos et al. 2021, 332, fig. 8/7), while Gepidic Age items were discovered at Morești (Horedt 1979a, 186–187). A more particular example is the buckle excavated in grave 1, which has an iron ring with a bronze tongue (Fig. 27; Pl. 1/1.3).

The only decorated iron buckle was found in grave 11, with its ring ornamented with notched lines (Fig. 27; Pl. 8/11.4). The buckles with ribbed decoration are a not very common, but characteristic find of the period, with a large variety. Besides iron, specimens of non-ferrous metal are more common, and both variants with and without plate are known. Its earliest variants in the Carpathian Basin appeared in the late Sarmatian – early Hun milieu (Párducz 1959, 377, Abb. 5/67, Taf. XX/23; Gulyás 2014, 16, IV. tábla/2), and occurred later in Hun and Gepidic Age cemeteries,[24] as well as in Byzantine contexts (e.g. Haas – Schewe 1993, 265, Nr. 8–9, Abb.

[24] E.g. Kormadin-*Jakovo*: Dimitrijević 1960, Tab. 1/7; Szentes–*Kökényzug*, grave 69; Kiszombor, grave 247;

11; Schulze-Dörlamm 2009, 12–15, Nr. 5–7). Due to their wide geographic distribution, the origin and the direction of distribution of the ribbed buckles is not entirely clear (Dobos – Opreanu 2012, 15–16, with further references). A more precise dating of simple specimens like the one from Ernei, is possible only based on other grave goods. In Transylvania, an oval bronze item is known from Breaza (Horedt 1958, 88, Abb. 28/4), and an iron kidney-shaped variant from Fântânele–*Dâmbul Popii* (Dobos – Opreanu 2012, 64, pl. 4/P 3.3).

Buckles with plate (Fig. 28)

Besides the three small footwear buckles mentioned above, the undisturbed grave 43 also contained two larger buckles (Fig. 28, Pl. 26/43.7–8; 42/3–4). One of them was found at waist level, near the lower end of the spine, the other on the sacrum. Both are fitted with an oval plate, which was attached to the belt with a rivet in the middle. Mostly made of silver or copper alloy, the buckles with oval or round plates represent a widespread type in the Early Migration Period, with formal antecedents in the late Sântana de Mureș – Chernyakhov culture (Petrescu 2010, 52, pl. 6/35) but also in late Roman context (Nagy 2005b, 448–449, Abb. 26).

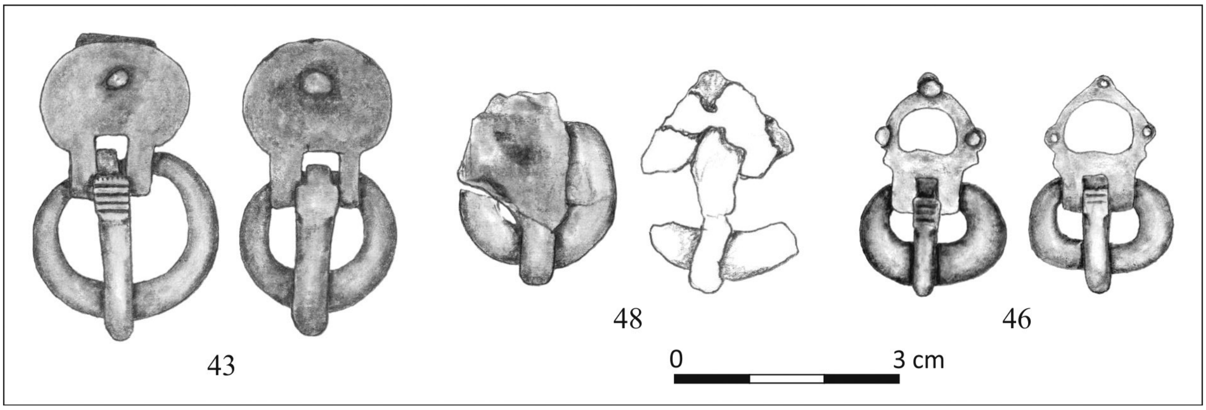

Fig. 28. Buckles with plate.

The specimens that developed by the middle of the 5th century mostly have a tongue with rectangular and often decorated base, with the buckle plate becoming larger and mostly oval compared to the earlier small and round shape (Tejral 1997, 350–351). These were used both as belt and footwear buckles, the most common variants having three rivets and an oval plate slightly more elongated than the examples from Ernei.[25] Such buckles are known from two sites in Transylvania: a belt buckle and two shoe buckles from grave 1/1964 in Bratei (Bârzu 1986, 91–95, fig. 2/2, 5–6; Harhoiu 1998, 167, Taf. LXXXIX/A.9–11), and a pair of shoe buckles from a female grave excavated in the Roman military fort at Turda (Bărbulescu 2008, 53–54, 153–154, pl./Taf. XV/4–5; XIX/4). In the Middle Danube area, the type is dated mainly to the middle third – third quarter of the 5th century (D2/D3–D3 phase) (Tejral 1997, 351).

From a structural point of view, the buckles found in a secondary position in grave 48 (Fig. 28; Pl. 31/48.2–3) are related to those from grave 43. They were discovered one next to the other, in the middle of the grave, with their backs facing upwards (Pl. 31/48.1). The two buckles have been preserved in a very poor condition, so their original structure can only be deduced from

Szabolcs County (Nyíregyháza Museum); Hungary – unidentified find place (Hungarian National Museum): Csallány 1961, Taf. XVI/15, CXLII/8, CCI/17, CCXVI/9.

[25] Specimens related to the ones from Ernei, fixed with one rivet, were discovered e.g. in grave 1 at Mezőkövesd-*Mocsolyás* (Lovász 2005, 50, Taf. 34/2, 4–5, 86/2, 4–5).

observations made during the excavation and from their condition before restoration (Fig. 29). The rings of the buckles are most probably made of bone,[26] while the raw material of the tongue was a copper alloy of poor quality. One of the buckles most certainly had an oval-shaped iron plate, fixed with two copper alloy rivets. Its traces were still visible when the grave was excavated, but only fragments preserving traces of textile remains could be saved during restoration. It is assumed that a similar plate may have been attached to the other buckle, but this is only indicated by traces of a metal strip folded over the ring. The special feature of the buckles is the combination of three different raw materials and, above all, the buckle ring made of bone. From Transylvania, a bone buckle ring is known from grave 2 in Apahida. Its gold plate is decorated with gems (Horedt – Protase 1972, 182, Taf. 39/1; Harhoiu 1998, 159, Taf. LXI/3).[27] Another specimen, also with gold plate, is known from Gyulavári (Csallány 1961, 111, Taf. CXCI/2), while a simpler piece without plate and with an iron tongue, dated in the Gepidic Age, was discovered in grave 60 at Szentes-*Kökényzug* (Csallány 1961, 34, Taf. XV/2).

In grave 46, a pair of small copper alloy buckles was found. One of them was lying in original position, at the upper end of the shinbone (Pl. 28/46.1), so the two buckles are clearly linked to the footwear. Both have a plate, which was fixed on the edges and the end with three rivets and a kidney-shaped inlay in the centre (Fig. 28; Pl. 28/46.2–3; 43/12–13). Unfortunately, the two buckles are relatively poorly preserved, one is missing the inlay and the plate has broken in two during restoration. The other specimen has survived in slightly better condition, but the clear identification of the technical characteristics of the amber inlay is impossible even in this case.[28]

Fig. 29. Grave 48, *in situ* photo of the buckles.

From a morphological viewpoint, the thickening buckle ring and the tongue base decorated with notched lines are closely related to the above-mentioned examples with no plate, and to the buckle with oval plate from grave 43. The buckle plate decorated with a kidney-shaped inlay can be connected to the gold shoe buckles of similar shape with garnet inlay from the Hun Age. The geographical distribution of the type covers a wide area, with a significant concentration of finds along the north-eastern coast of the Black Sea and in the Central Danube region (Schmauder 2002, I, 352–355, Fundliste 25, II, Karte 14; Harhoiu 2021, 43, Abb. 21). The round or kidney-shaped plate of these buckles is decorated with cloisonné technique or a single inlay. An important detail on the buckles from Ernei is the three rivets protruding from the arc of the buckle plate, which is known on many of the above-mentioned gold buckles and is a typical Hun Age fastening technique, quite rare in the second half of the 5th century on buckles of similar construction (Schulze-Dörlamm 2009, 85).[29]

[26] No scientific research has been carried out so far.
[27] In his catalogue, Michael Schmauder (2002, II, 12, Taf. 16/6.1) lists pumice as the raw material for the buckle ring from Apahida.
[28] The inlay was reinserted in the buckle plate during restoration, but it is not clear how it was originally fixed.
[29] E.g. in the lower Danube region, on a chip carved shoe buckle from the grave at Bistreț (Marcu 1987, 187, fig. 4/1; Harhoiu 1998, 162, Taf. LXXXIII/A.5). It cannot be ruled out that the fixing of the buckles from Ernei by means of the three rivets was similar to that of the specimen from Bistreț.

Solitary garnet or glass inlays similar to those on the buckles from grave 46 at Ernei are common on small buckles or suspender loops. They are mostly round, less often kidney-shaped. In Transylvania, the latter is represented by a gold buckle from the 2nd princely grave at Apahida (Horedt – Protase 1972, 180, Taf. 33/4) and the low-quality bronze mounts from Fântânele–*Dâmbul Popii* (Dobos – Opreanu 2012, 64–65, pl. 5/1.2–4; 36/5–7). Kidney-shaped inlays also appear on other objects, not only by themselves, but also as components of more complex decorative motifs (for their distribution, see Schmauder 2002, I, 332–333, Fundliste 9, II, Karte 7). The earliest specimens appeared as early as the 4th century, becoming really popular in the 5th century, especially in its second and third quarters (Quast 2007, 39–42).

Gem-decorated shoe buckles made of gold were a representative item of clothing for the Hun Age elite (Tejral 1997, 338; Schmauder 2002, I, 160). In all likelihood, the buckles from grave 46 at Ernei are their local, less expensive imitations.

VI.2. WEAPONS (Norbert Kapcsos M.)

VI.2.a. Arrowhead (?)

The function of the small, elongated iron object from grave 59 (Pl. 37/59.2) is questionable; thus, its interpretation as an arrowhead should be treated with reservations. The object recovered in secondary position is extremely poorly preserved and its formal features do not make typological remarks possible.

VI.2.b. Spearheads

Spearheads are known from two burials in Ernei (2 and 48), but only grave 48 provides some indications regarding the position of the spearhead within the grave pit. As it appears, the spear was placed according to the orientation of the burial, with its head to the west, on a step along the longitudinal, northern wall of the pit (Pl.31/48.1). In contrast, the weapon of grave 2 was found in secondary position (Pl.2/2.1), and an almost identical position as in grave 48 can only be assumed. Burials with weapons are not spatially clustered within the cemetery, the two burials being relatively far (~18 m) from each other and well separated.

The percentage of burials containing spearheads is very low, accounting for only 2.81% of the cemetery, although it is worth noting that with such a high rate of reopened graves, this ratio is not reliable. Unfortunately, taking only anthropologically known male burials into account is not relevant either, as sex determination was possible in only three cases, two of which were male. It is noteworthy, however, that the study of the connection between gender, age group and the habit of depositing weapons in burials has a very exciting potential (Härke 1992, 185–216). Luckily, grave 48 is one of the rare cases where the sex and age of the deceased are known. Given the advanced age of the *senilis* male from the burial, the question arises whether the spearhead really reflects his social status (warrior?) or rather his one-time social persona, recognized by the community at the time of his death (Binford 1971, 17). Unfortunately, the fragmentary data leave this question unclear. Nevertheless, in grave 2, which contained the other spearhead, two further ceramic vessels were discovered, which may suggest that the unusual pottery and weapon funerary equipment expressed the deceased's distinguished social status.

Typological conclusions are, similarly, extremely limited, particularly because the less favourable soil conditions led to a high degree of corrosion of the spears, to the extent that formal features are difficult to observe. For this very reason, the spearhead from grave 48 could not be conserved during the restoration process due to the lack of an iron core. Field observations suggest that it was

a spearhead with closed socket. Also, the question whether the spearhead from grave 2 belongs to the group of elongated, willow leaf-shaped spearheads with closed socket (Kiss 2015, 224), is left open. In any case, it is reminiscent of Hun Age pieces known from the cemeteries in the Carpathian Basin in Csongrád–*Kenderföldek* (Párducz 1959, Taf. XVII/2), Csongrád–*Berzsenyi Street* (Párducz 1963, 69. Taf. III/10) or Tápé–*Malajdok* (Párducz – Korek 1948, LXI. tábla/1).

It may be important to consider that burials with weapons are very rare in the Sântana de Mureş – Chernyakhov type cemeteries of the preceding period, as it is a general characteristic of the 4th century burial rite that no weapons are placed next to the deceased (Körösfői 2016, 268). Under these circumstances, it is interesting to note that weapon grave goods in the cemetery from Ernei indicate a kind of discontinuity, the socio-cultural background of which cannot be clarified for lack of adequate data.

VI.3. TOOLS (Zsolt Körösfői)

VI.3.a. Combs

Bone combs were discovered in five graves at Ernei. Of these, only the specimen from grave 43 was in original position, and, judging by the remains of leather observed on the left side of the deceased woman's pelvis, it was kept in a leather purse or beaded pouch hanging from the waist. The other combs were recovered from heavily disturbed graves in secondary position. It is interesting to note that while few fragments of human bone have been preserved from the burials in question, three combs could be recovered, despite their poor preservation.[30] In the case of the other two, this was only partially achieved: the imprint of the comb from grave 54 was lifted and conserved together with the clod, while only a small fragment from grave 68 has been preserved.

The combs from Ernei represent different variants of Thomas type III (Thomas 1960, 104–114). They consist of three layers, with the central, tined sheet (or sheets) held together on the two sides by outer cover plates. Without doubt, the outer plates of the items from graves 1, 43, 46 and 68 were made of one piece, and it is most probable in the case of grave 54 as well.

The items from grave 1 (Pl. 1/1.2) and 54 are examples of the widespread comb shape used in the heyday of the Sântana de Mureş – Chernyakhov culture. The comb of grave 1 corresponds to Cnotliwy variant 3 (Cnotliwy 2010, 25), a type that first appeared in the environs of the Greek cities on the Black Sea coast and was most widespread in the 4th century AD (Bíró 2002, 55–56). Later, in Pannonia, where all the Late Imperial Age comb types were produced at a certain time, this type differed from the others by its complete absence in Csákvár and Szabadbattyán (Bíró 2002, 55–56). In Western Europe, the combs in question are considered one of the archaeological landmarks of the Goths and their movements during the early Migration Period. As far as we know, they were still in use in the 5th century (Tica 2018, 408). Regarding the site at Ernei, it is not irrelevant that they occurred in the former territory of the Sântana de Mureş – Chernyakhov culture in the early 5th century AD (Ščhukin et al. 2006, 128–145).

The comb from grave 54 must have been very similar. Only its imprint was conservable, and it suggests that it was almost identical to that of grave 1, only slightly larger. The difference lies in the fact that the side plates at the base of the comb's handle from grave 54 were cut out in a semi-circular shape, which is typical for another known variant of the Sântana de Mureş – Chernyakhov culture.

Compared to the two previous combs with high handles and wide side plates, the items from grave 43 (Pl. 27/43.3; 42/7) and 46 (Pl. 29/46.1) are characterised by small handles and narrow,

[30] They were restored by Erika Németh Dankóné (Jósa András Museum, Nyíregyháza).

long side plates. The one from grave 43 shows similarities with several types from Eugeniusz Cnotliwy's typology. Its form and decoration is most closely related to an example found in Eketorp (variant IB/A/12), which is probably an imitation of combs made in the Pannonian workshops. However, the handle of the above-mentioned comb and its lower part are made of separate bone plates, unlike the one from Ernei. Combs of similar shape are found in Northern Europe, such as variant IB/A/11 (with slanted shoulders) or type IB/A /9b, which are widespread in the Scandinavian area. These together with their 9a counterparts, are generally dated to the first half of the 5th century, while their Baltic equivalents are dated up until 475, slightly later than the Central European ones (Cnotliwy 2010, 50). The bone plate adhering to the tines, also decorated with rings-and-dots, is most likely a preserved fragment of the comb case.

The comb of grave 46 is most similar to the Cnotliwy variant 13 and, unlike that of grave 43, is undecorated. Contrary to the combs from graves 1 and 54, their counterparts were found outside the earlier areas of the Sântana de Mureș – Chernyakhov culture, in Central and Northern Europe (Cnotliwy 2010, 220, ryc. 28).

The type of the small fragment discovered in grave 68 (Pl. 41/68.2) is hard to determine. It most probably belongs, like the others, to the group of the lobed backed combs.

Combs are perhaps one of the most interesting groups of finds in the cemetery from Ernei, and their types raise important questions. This stems on the one hand from the long-established chronological and cultural significance of this toilet instrument,[31] but also from the fact that the types found here are unknown in the row-grave cemeteries (Masek 2016, 131). The unusual situation is reinforced by the complete absence in Ernei of the double-sided combs, typical for the Gepidic period, when these represented the almost exclusively used type (Bíró 2002, 68).[32]

The combs from Ernei are associated with the Sântana de Mureș – Chernyakhov culture and the Gothic circle. With the decline of the Late Imperial horizon in the Hun period (C3/D1) and the westward migration of the population, they spread throughout Europe (Cnotliwy 2010, 181). Items found in Western Europe (mainly Gaul and Spain) (Kazanski 2020), as well as south of the Danube (Petković 2015) are considered typical finds of the above archaeological and historical context. The fact that from the end of the 4th century, a number of newly opened workshops started – or rather continued – to produce in Pannonia various types of combs based on the Chernyakhov tradition, does not fundamentally alter this reality. In the last period of the culture (C3/D1), animal figures drawn by hatching and punching appeared on combs. In Ernei's vicinity specimens are known from Mediaș, Lechința de Mureș (goat) and Târgu Mureș (rabbit). Since zoomorphic decorations from Pannonia are more numerous than those of the Sântana de Mureș culture, it is possible that the Transylvanian pieces were made not locally but imported from a Roman workshop in Pannonia (Ottományi 2001, 53). It remains a question whether the combs from Ernei originate from these Pannonian workshops, which were active until the mid–5th century, or from the Gothic *foederati* who settled there.[33] One may also consider the possibility of them being made locally, on the former territory of the Sântana de Mureș – Chernyakhov culture, where combs had been mass-produced a century earlier. Based on the current state of research, the latter is quite unlikely, as the mass production of the previously known types in

[31] The first comb typologies were created for Central Europe (Thomas 1960) and the Sântana de Mureș – Chernyakhov culture (Nikitina 1969). A brief summary of the history of comb research: Musteață 2017.

[32] Ottományi 2001, 50, 54; Dobos et al. 2021, 343. In Pannonia, double-sided combs were used mainly by the surviving provincial population, the new Germanic population and the Gepids who lived outside the province a generation later. The latter used exclusively this type. It was not until the middle of the 5th century, when the Pannonian cemeteries had been closed, that the double-sided comb appeared among the Gepids.

[33] Cnotliwy 2010, 181. There is no archaeological or written evidence for the settlement in Pannonia of the Gothic – Alan – Hun foederati led by Alatheus and Saphrax. (Kovács 2021, 93).

this region cannot be confirmed after the departure of the Late Imperial Age population from Eastern Europe (Musteață – Popa 2010, 165; Musteață 2017, 208).

The combs found in Ernei raise the even more important question of the people who used them. The scientific world agrees on the fact that the needs of the Germanic peoples were met by Roman production (Tica 2018, 401; Bíró 2002, 68), but there are also geographically distinct trends in the use of comb types in the Barbaricum. As Mária Bíró (2002, 59) put it, the Gepids preferred the double-sided, while the Goths opted for lobed backed combs. Since the Germanic double-sided combs replaced the lobed backed ones by the second half of the 5th century (Tica 2018, 415), the Ernei specimens are archaic in their context, and this is evident not only in their form but also in their decoration. Instead of the scratched and incised linear motifs typical of the period, the Ernei pieces have a rings-and-dots decoration, unknown in Late Imperial Pannonia east of the line of Tokod and Szőny (Ottományi 2001, 49), and more typical in the Pontus region for the Sântana de Mureș – Chernyakhov culture (Bíró 2002, 55). In Transylvania, combs with similar decoration are known only from Târgu Mures–*former Mikszáth Kálmán Street*, grave 10 (Kovács 1915, 288) and from Odorheiu Secuiesc–*Alsólok*, pit no. 474 (Körösfői et al. 2010, 38). Rings-and-dots ornamentation also appears on amulets. In the Sântana de Mureș – Chernyakhov culture, combs were generally undecorated and only on specimens found west of the Dniester (Sântana de Mureș culture) does the ornamentation consist mostly of simple lines and groupings of rivets.

There is only one example in Romania for such a late presence of a lobed backed comb. Moreover, all of the combs found in Ernei represent a variant of the comb types widely spread in the Sântana de Mureș – Chernyakhov culture, except for the fragment from grave 68, which cannot be identified with certainty. Their closest parallel in space and time is the comb from grave no. 1 at Sângeorgiu de Mureș–*Kerekdomb* (Dobos et al. 2021, 333, fig. 8/1; 9/3). Although the grave from Sângeorgiu de Mureș is archaic due to its eastern features, its latest objects (glass beaker and gold mount) date it to the second half of the 5th century, i.e. it is contemporary with the community using the cemetery from Ernei. (Dobos et al. 2021, 343, 346.)

The fact that the combs from Ernei stand alone, can be partly explained by the state of research, as there are still few Late Imperial Age and Early Migration Period cemeteries and settlements in Transylvania that have been extensively researched. All in all, it seems that on both sides of the Terebici stream we are dealing with a society which preserved some traditions from an earlier period. Less than 800 metres from the Ernei cemetery, a post-Chernyakhov sacrificial pit dating from the late 4th – early 5th century AD is known (Crișan – Lăzărescu 2010), and less than two kilometres to the south, the above-mentioned contemporary burials were found at Sângeorgiu de Mureș. The sporadically known finds are scattered over a very narrow area of a few square kilometres, less than 10 kilometres from the Late Imperial Age cemeteries at Sântana de Mureș (Kovács 1912) and Târgu Mureș (Kovács 1915), which were abandoned at the end of the 4th century – beginning of the 5th century.

All this makes it less important, or at least difficult to determine where the combs were made. They may have reached Ernei by a similar route as their counterparts excavated in the Upper Tisza and Vág regions, which were imported at the end of the Late Imperial period (C3/D1) from Moldova and Volhynia via Transylvania and later, in the D1–D2 period from Pannonia (Cnotliwy 2010, 184). It is more important to ascertain, why lobed backed combs were placed in the graves in Ernei instead of the more fashionable and widespread double-sided combs of the period.

A kind of traditionalism can be discovered behind these combs, considered archaic, or at any rate out of fashion, without attributing a far-reaching ethnic and social role to the objects.

Similar examples from Romuliana are thought to have been produced partly locally, and partly in the Sântana de Mureș – Chernyakhov culture area at the end of the 4th century AD, from where they ended up in Romuliana at the end of the century and were finally buried in the ground in contexts dating from the end of the 4th to the beginning of the 5th century AD.[34]

VI.3.b. Spindle-whorls

Weights of hand spindles made by craftsmen and used for providing and maintaining the momentum of the spindle were found in graves 23 and 43 in Ernei. The two specimens are of different type: the one from grave 23 is asymmetrical double conic (Pl. 11/23.5; 43/10), while grave 43 concealed a disc-shaped spindle-whorl (Pl. 24/43.7; 43/9).

The spindle-whorl in the completely disturbed grave 23 was found next to the long bones of a small child, presumably dislocated (Pl. 11/23.1). By contrast, the specimen from grave 43 was discovered *in situ*, at the right forearm of the deceased, in an upright position (Pl. 23/43.1), indicating that it was buried along with the wooden spindle shaft. The latter is known to have been of very different sizes, for example, somewhere between 200 and 400 mm long, in the case of the Sarmatians (Pópity 2015, 109). Although we did not manage to identify the imprint of the spindle shaft, the position of the spindle whorl suggests that the spindle was placed in the grave in the hand-knee line, facing downwards.

The construction and shaping of the spindle whorls may be the result of a tradition handed down from mother to daughter through generations, which carries a certain social, ethnic and cultural uniqueness in the case of the Sântana de Mureș – Chernyakhov finds, as highlighted by Boris V. Magomedov (2015). Regardless of the period, research considers them to be finds associated with female individuals, which was confirmed by the anthropological analysis of grave 43. Grave 23 was completely disturbed, and the remaining fragmentary bones indicated only that it was a child, without making its sex definable. However, the beads found in the western half of the grave suggest that it was a girl.

VI.3.c. Knives

Nearly one third of the burials, 15 graves in total, contained iron knives or fragments that can best be considered parts of a knife. Due to grave reopening, they were generally in a very poor state of preservation, in most cases only their original shape and size can be deduced. After excavation, most of them consisted only of fragments, so field observations and photographic or drawn documentation proved very useful in determining their shape and size. For this reason, the catalogue lists their length, as measured from their rusty imprints, wherever possible. This proved particularly useful in the case of graves 1 (Pl. 1/1.7) and 6 (Pl. 3/6.2), whose form could be relatively well documented at the time of excavation, but only a few fragments could be saved, most of them having been completely destroyed by rust.

Among the knives, there are slightly more straight-backed (6) and fewer curved (4) pieces. The tangs used to fasten the handle represent roughly the same proportion of upper (6) and middle (5) position. It appears that the shape of the knife does not determine the position of the tang, both types having extensions both in the middle and in the upper position.

Of the relatively large number of iron knives, the length of only a few can be determined or deduced. Based on this, they measure roughly around 120 mm, the knife of grave 43 is much

[34] Petković 2015, 361. The Germanic beliefs attributed men's force to their hair (combs were placed in men's graves as well), so it has a significant cultic role. They may have kept combs for 50–100 years, even through generations.

longer, 180 mm. The tangs are generally of the same cross-section and thickness as the blade, and less often hammered into a square or pointed shape. Of the heavily corroded objects, only the item from grave 1 had an iron rivet.

They were found in a secondary position in massively disturbed graves, so it is uncertain whether they were originally placed in the burial pits as grave goods or in wearing position. The exception is grave 43, where the longer than average iron knife was lying in a horizontal position on the right side of the chest (Pl. 23/43.1).

VI.4. POTTERY (Norbert Kapcsos M.)

17 pottery items were discovered in the cemetery from Ernei. Ceramic containers were found in 20% of the 70 burials, i.e. 14 graves, three of which contained more than one piece. Apart from these, graves typically had one vessel. A significant percentage of the pottery was found in a relatively intact state or was easy to assemble (7 specimens). Those that have been preserved in a fragmentary, but completable state and their shape could still be identified, were fewer. However, a significant number (6 pieces) were fragments that only seldom allowed the identification of the shape.

Connection between pottery and rite

Due to the high rate of reopened burials, the original position of the ceramic containers within the grave is scarcely known. Only in a few cases was it possible to document the vessels in their original position[35], in the south-west corner of the grave, placed on a step (graves 2 – Pl. 2/2.1; 25 – Pl. 14/25.1; 43 – Pl. 23/43.1, 47 – Pl. 29/47.1; 48 – Pl. 31/48.1; 54 – Pl. 35/54.1). The few known cases, as well as the secondary position of the ceramic fragments within the burial pit, suggest that pottery was usually placed in the western part of the grave, presumably outside the possible coffin, in accordance with the orientation of the burial, close to the head of the deceased. The placement of the ceramic vessels in the vicinity of the head, in this case in the western part of the burial pit, reflects the characteristics of a widespread funerary rite in the Carpathian Basin from the late 4th to the early 5th century (Megay 1952, 132; Bóna 1993, 38. kép; Lovász 1999, 243, II. tábla; Lovász 2005; Mesterházy 2009, 76, Abb. 2; Grumeza – Cupcea 2020, 419, fig. 5/4; Beck et al. 2021, 119, 10. kép). However, questions regarding the – presumed (?) – preference for the south-western corner remain to be clarified.

Only three of the burials, namely graves 2, 54 and 68, contained more than one item of different types in the same burial pit. Considered within the burial site, this may indicate a more prominent, or at least a different social status of the deceased in comparison with other burials.[36] Seen in a somewhat broader geographical and chronological context, it also bears similarities with the ritual characteristics of the earlier Sântana de Mureș – Chernyakhov type burials of the 4th century, where a larger number of ceramic vessels in the same grave may be regarded as common (see Hica-Cîmpeanu 1976, 30–31; Kovács 1912; Körösfői 2008, 196).

Interestingly, a combination of vessel types (jug, ovoid vessel, glass beaker) almost identical with the one from grave 54 was recently found in Nyíregyháza–*Csorda-Páskum II*, site M3–58 (Beck et al. 2021, 119, 10. kép). It should be added, however, that there is a slight difference in the arrangement of the vessels within the grave, since in the case of the burial at Ernei the small ovoid vessel and a further glass vessel was placed in the mouth of the jug. The combination of

[35] The position of the vessel in grave 19 is uncertain.

[36] Presumption seemingly confirmed by the iron spear-head from grave 2 or the glass beaker from grave 54 (for more on the subject, see: Binford 1971, 23).

ceramic vessels in graves 2 and 68 is somewhat different. Although the jug was present in these graves as well, it was combined with a pot in the former grave and with a bowl in the latter.

Connection between pottery, gender and age

Due to the low proportion of burials with pottery and the poor preservation of human bones, there was little opportunity to investigate the relationship between the sex and age of the deceased and the habit of laying pottery into the grave. Based on the known cases, one can affirm that ceramic vessels occur in both child and adult burials, from Infans I to Senilis. As for the types of the vessels by age group, a small cup is known from two Infans I child burials (19 and 23), while a jug is known from two Adultus burials (25 and 43). Therefore, no firm conclusions can be drawn from the above data.

Technology, typology and chronology

The majority of the ceramic vessels were thrown on a fast wheel (10 pieces), a smaller proportion on a slow wheel (5 pieces) and only few (2 pieces) are handmade. Most of them are well levigated, fine ceramics (10 pieces) and only a minority of the vessels are of grained fabric, tempered with crushed pebbles (7 pieces). The amount of reduced ware (12 pieces) far exceeds the number of brick-coloured pottery fired in an oxidising atmosphere (5 pieces), with the former being mostly characteristic of well-levigated fine ceramics and the latter more of slow-wheeled grained pottery.

Based on the broken surface of the fine pottery vessels thrown on the fast wheel, the two-stage reduction-fired pottery (Masek 2011, 266) (graves 43, 53, 54) is clearly distinguished from the grey pieces with homogeneous broken surface and grey pieces with a 'sandwich' structure (jug from grave 2), where the former indicate the survival of the technology used in 4th century Sântana de Mureș – Chernyakhov style pottery. Within the group of the ceramic vessels thrown on the fast wheel, a distinction is made between well, or at least better fired pieces (jug from grave 2, grave 43) and vessels with a porous consistency (graves 14, 25, jug from grave 54). While the badly preserved porous pieces could be explained by the clay's specificity, insufficient drying or the quality of firing, it is worth noting that the solidity of better-preserved pieces is also somewhat different from the 'usual' pottery. Regarding the surface treatment, the smoothing of the pottery thrown on the fast wheel is frequent (11 pieces), perhaps by wiping with a piece of cloth or leather (for more on the technique, see Masek – Véninger 2017, 63). Of particular interest are those pieces on whose surface the – presumed – smoothing has survived only as a very poorly preserved shell, in flaking patches (graves 14, 25).[37] In the surface treatment of vessels thrown on the slow wheel, the possibility of a kind of engobe arises in the case of grainy vessels such as the ones from graves 19, 35, 48, 54, with the technique most obvious on the ovoid pot from burial 35. Typically, the surface of hand-made pottery was treated with less care, resulting in a rather uneven surface.

From a typological point of view, the ceramic vessels show a less varied pattern, with mainly jugs (7 pieces), small ovoid vessels (3 pieces) and cups (2 pieces) being laid in the grave. Bowls and globular vessels occurred in only 1 case each, and the vessel fragments could not be typologically identified in 3 cases. However, a closer look at the jugs (Fig. 30) reveals a relative diversity, with at least different variants/subtypes occurring within the same type. Of the seven jugs, four are of Murga type or related to it (grave 14). The rim construction of jugs from burials 2 (Pl. 2/2.2; 46/2) and 68 (Pl. 41/68.5) is almost identical, the former can be classified as a subtype

[37] It is not clear whether this is related to soil conditions.

with a curved widening in the lower third (Masek 2013, 238, Abb. 4). From a formal point of view, its geographically close parallel is known from Târgu Mureș (Harhoiu 1998, Taf. XCII/2), but it also has analogies on the Great Hungarian Plain (Párducz 1959, 337; Tănase 2013, 158, pl. II; Beck et al. 2021, 119, 10. kép) which is understandable, since it started to spread widely and gradually beginning with the period immediately preceding the Hun Age.

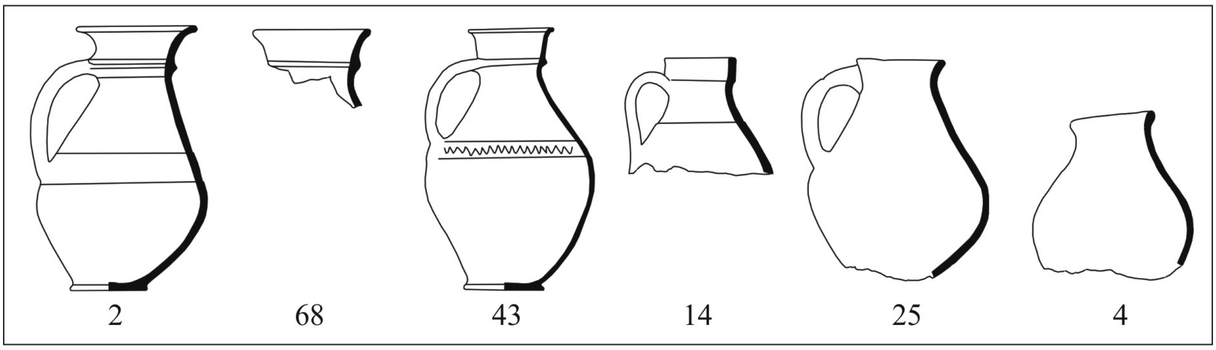

Fig. 30. Jugs.

In a micro-regional context, the jug from burial 43 (Pl. 24/43.1; 46/1) seems to be particularly interesting, as its rim construction shows some similarities with a jug coming from a burial at the nearby Sângeorgiu de Mureș–*Kerekdomb* site (Dobos et al. 2021, 331, fig. 5–6). Considering that the belly part of both jugs widens in the middle, one can regard this piece as a close parallel to the – slightly stockier – Ernei jug, apart from the slender neck and the almost right-angled break of the handle.[38]

Although seldom, but Murga-type jugs with less everted and only slightly curved rims also occur (Bóna 1993, 163, 110 kép; Tejral 2011, 139, Abb. 96/4; Masek 2013, 243, Abb. 6/1), a vertical rim is quite rare. The jug from grave Cx. 14 (Pl. 9/14.2) is rather unusual with its vertical rim, so much so that it is a unique piece in the Transylvanian Basin and, strangely enough, its closest formal parallel is known from the Great Hungarian Plain, around Szentes (Párducz 1950, Taf. CXXVIII/34),[39] albeit with a different handle design. The geographically distant parallel raises the question of whether the piece from Ernei represents a separate subtype, or a less successful imitation of jugs known from its immediate surroundings.

The decoration of the Murga type jugs from Ernei is less varied. Apart from the plain rib on the neck, typical for the Murga-type jugs, only one item (grave 43) shows with certainty a smoothed-in horizontal zigzag pattern, characteristic for the pottery from the period around the Hun Age (see Harhoiu 1998, Taf. XCVI; Opreanu 2013, 73, pl. XIII; Tănase 2013, 158). It is impossible to determine whether the jug of burial 2 was decorated in this way; there are hardly any traces of indistinct burnishing, and the surface of the vessel is extremely worn. As far as their dating is concerned, the formal features and decoration of the Murga-type jugs suggest a period of approximately D2–D3 (Masek 2013, 242), perhaps more towards its end. This seems to be supported by their peculiar disk foot, which carries a period-marking role (Masek 2013, 241).

The jugs from burials 4 (Pl. 4/4.2; 46/3) and 25 (Pl. 14/25.2; 46/4) represent a less typical form of the period's ceramic material in the Transylvanian Basin, and, quite unusually, they have no exact parallels among the jugs of the preceding 4th century period. Although there are some similarities with the forms of some jugs from Suceag (Opreanu 2013, 67, pl. VI), the neck of the

[38] There are further differences in the pattern of the smoothed-in decoration of the two jugs, moreover, the surface treatment of the Ernei specimen is much more superficial than that of the Sângeorgiu de Mureș one.

[39] A similar vertical rim design is known from a jug discovered at Solt–*Vadkert*, too (Párducz 1950, Taf. CXXVIII).

pieces from Ernei is much slenderer, while the belly, which also widens at the middle, is stouter. By contrast, the two jugs show a much greater similarity with certain forms from the Great Hungarian Plain, such as the pieces known from Szeged–*Csengele* (Párducz 1950, Taf. CXXIII/7) and Orosháza (Párducz 1950, Taf. CXXV/11).

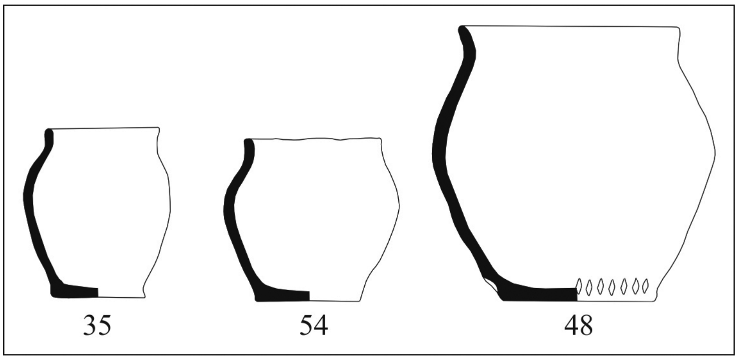

Fig. 31. Vessels thrown on the slow wheel.

The ovoid vessels thrown on the slow wheel (Fig. 31) are interesting also from the point of view that the slow wheel technique is mainly characteristic of larger pots, at least, based on the better-known sites of the 4th century from the Transylvanian Basin (Körösfői 2011, 101, see also table). In the 4th-century cemeteries geographically closest to Ernei, formal parallels of the pots are known from the cemeteries at Sântana de Mureș (Kovács 1912, 262, 10. kép, 270, 24. kép) and Fântânele–*Rât* (Marinescu – Gaiu 1989, 132. Abb. 5; see also: Harhoiu 1998, Taf. LXXXV–LXXXVI), but their technique differs from that of the vessels from Ernei, since both hand-made and – presumably – fast wheeled variants occur. The same can be stated about the vessels of identic shape found at Târgșor (Diaconu 1965, 293, pl. CXLIV, 294, pl. CXLV), Budești (Vornic 2006, 394, fig. 86) and Bârlad (Palade 2004, 495, fig. 160).[40] There are many more parallels than listed, suggesting that this was a widely popular vessel form, produced with a variety of techniques. Although from the point of view of the technique is not very clear, but in terms of shape and sometimes material, the ovoid vessels seem to point towards the Sântana de Mureș – Chernyakhov pottery tradition from the 4th century and may suggest its continuation. The shallow, irregularly shaped decoration, perhaps impressed with a finger, on the base of the vessel from grave 48 (Pl. 32/48.1; 47/1), also seems to support the perpetuation of earlier pottery traditions. The clearly fingertip-impressed decoration on the part directly above the base of the pots also comes up on different vessel types of the 4th century (Diaconu 1965, 198, pl. XLVIII, 269; CXIX; Palade 2004, 263, fig. 8/11, 272, fig. 13/3, 290, fig. 22/15). It is most frequent on the fingertip-impressed cups delimited by Kurt Horedt (1982, 76–82), which are now dated with relative certainty to the period between the second half of the 4th century and the beginning of the 5th century (Opreanu 2011, 193).

The hemispherical bowl thrown on the slow wheel from grave 68 (Pl. 41/68.4; 47/6) is far from being one of the most common types in the Transylvanian basin. One may take into consideration the fragments of the settlement excavated at the Filiaș–*Pig farm* (Crescătoria de porci/Disznóhízlalda) site (Körösfői 2011, 152, 18. tábla) for finding its closer parallels; similar pieces from burial sites are almost unknown. Although there is a formal similarity with the hemispherical bowls from the earlier Cipău–*Gârle* burial site (Vlassa 1965, 507,

[40] Within the category of wheel-thrown pottery, it is not specified whether slow or fast wheel was used.

fig. 7), those differ from the piece from Ernei both in terms of their fine fabric and the fast-wheel production technique.

The hand-made small spherical vessel from grave 62 (Pl. 39/62.2) represents a much more common type; its closest parallel is known from Sântana de Mureș (Kovács 1912, 283, 41. kép), although other variants with different rim construction come from the same burial site.

Conclusions

There is a certain degree of concentration of ceramic vessels in the central part of the cemetery, and it is peculiar to note that smaller or larger groups of graves on the periphery rarely contain pottery (Fig. 32). At this stage, it is not clear whether the pattern in itself represents a chronological, ritual or social factor, or a combination of the three. Nevertheless, the ceramic grave goods of the cemetery from Ernei reflect both continuities and discontinuities that can be associated with the burial rites of the 4th century, or interpreted in their light. The presence of pottery in the graves indicates the continuation of earlier customs, but the same applies to the low percentage (20%) of burials with ceramic vessels,[41] given that, according to observations made in the cemetery from Sântana de Mureș, the practice of adding (ceramic) grave goods was less frequent in the later phase of the necropolis (Körösfői 2016, 193).

Nevertheless, compared to the 'classical' Sântana de Mureș – Chernyakhov type burials, the cemetery is characterised by a less varied pattern of ceramic funerary offerings, which is reflected in both the quantity and composition of the ceramic grave goods. The proportion of vessels associated with drinking, i.e. liquid storing and drinking vessels is strikingly high (11), in so far as the ovoid vessels from graves 35 and 54 are also considered drinking vessels. Although liquid containers and drinking vessels occur in earlier burials as well, in this case a kind of dominance is palpable. This may reflect a change in the perception of the afterlife. The specific social and/or cultural background of this phenomenon is difficult to clarify at this stage. It is a fact nonetheless that 5th century burials carry more frequently funerary furnishings associated with the act of drinking.[42]

From a technological point of view, continuity in the occurrence of vessels thrown both on the fast and slow wheel is relevant, and so is the firing – grey and two-stage reduction fired pottery – which seems to date back to the earlier period, marked by the Sântana de Mureș – Chernyakhov culture. In this context, the quality of the pottery thrown on the fast wheel, more specifically its less solid, sometimes porous character (graves 25, 54), and occasionally superficial (graves 4, 14, 43) or less careful surface treatment (graves 25, 68), raises interesting questions. The probably insufficient firing or drying time and the inadequate surface treatment could raise the possibility of pottery made with the special purpose of being placed in the grave, with insufficient time to prepare it properly. In addition, the ceramic grave goods are assumed to be the technological continuation of the earlier regional Sântana de Mureș – Chernyakhov pottery, but certain types of pottery, mainly jugs, also show later Hun Age forms, which imply a geographically extended system of connections.

Murga-type jugs or the spherical jugs with excellent parallels from the Great Hungarian Plain are to be considered in this regard. Based on the above-mentioned qualitative characteristics, these could presumably have been made in imitation of certain known types of

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[41] One should also consider the possibility of the grave goods being removed during opening as well as the likelihood of wooden and decomposed vessels.

[42] See for example the following burials: Regöly (Rácz – Szenthe 2015, 379); Lébény (Bóna 1993, 38. kép); Nyíregyháza (Beck et al. 2021, 119, 10. kép); see also Chapter VI.5.

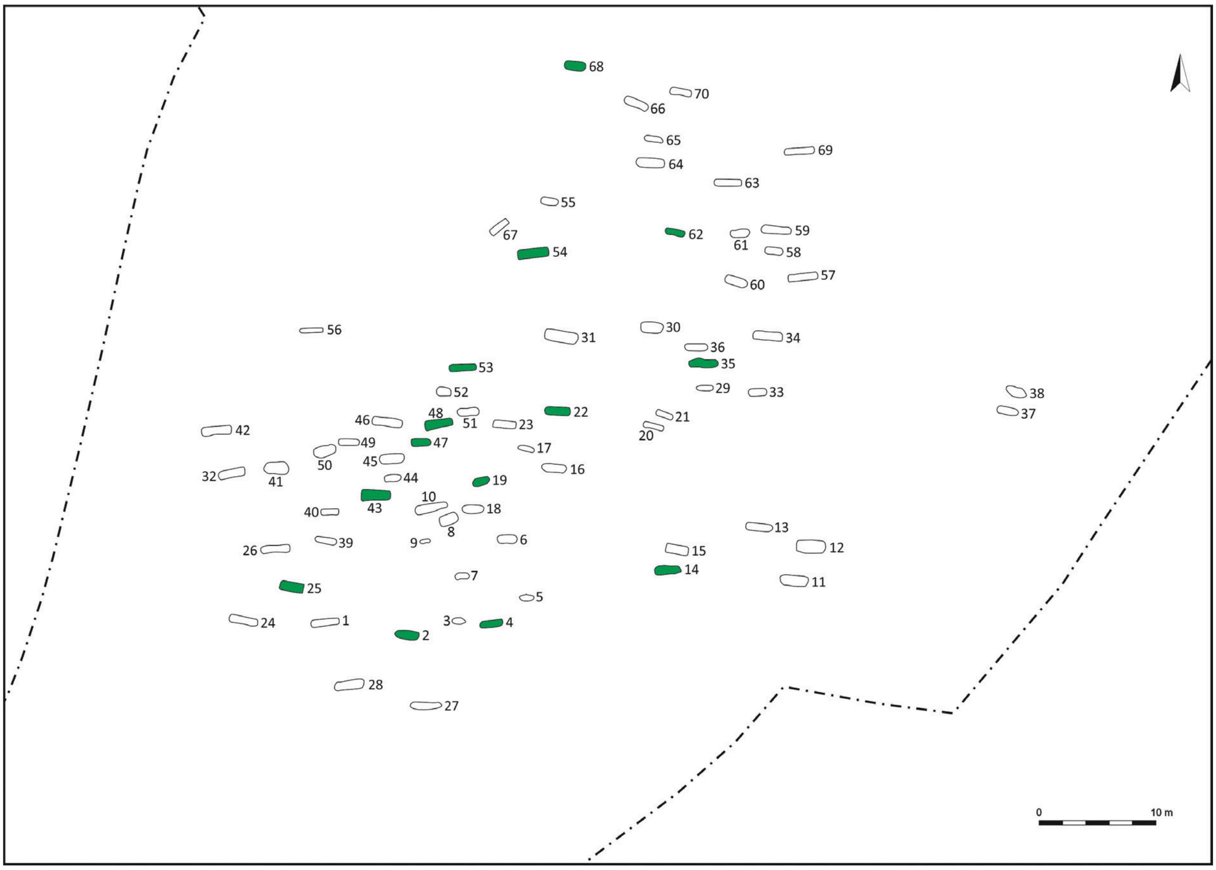

Fig. 32. Distribution of the burials with ceramic vessels.

vessels[43] and placed in burials, which were already in accordance with the grave offering customs typical of the Hun Age.[44]

The occurrence of imitations raises the possibility that the archetypes (Fig. 33) may have served as prestige objects and thus as a representation of social status in burials. On the other hand, imitations were accessible to those of lower social status, whereby they could follow the trend/representational pattern set by the elite[45] and thus participate in social competition (for more on the subject, see MILLER 2006, 89).

In the light of the above, it seems that the community using the burial site from Ernei had been previously integrated into the Hun power structure to some extent, and tried to follow in its ceramic grave offering practices the representational patterns established by the former Hun Age elite, preserving certain elements of these patterns.

Fig. 33. Silver jug from the Masque d'Or grave, 1837 (after ŠČUKIN ET AL. 2006, 370, fig. 85)

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[43] It is necessary to clarify that the well-executed Murga-type jugs are presumably in themselves imitations of earlier silver models (ŠČUKIN ET AL. 2006, 370, fig. 85) from the Late Imperial Age elite burials known from the Crimean Peninsula. The pieces from Ernei are probably imitations of ceramic jugs from the Carpathian Basin.

[44] According to the orientation of the grave, next to the head, possibly on a step.

[45] See for example Mezőkövesd–*Mocsolyás* (LOVÁSZ 1999, 243, II. tábla); Marosszentgyörgy–*Kerekdomb* (DOBOS ET AL. 2021), Regöly–*Pénzesdomb-Homokbánya* (RÁCZ – SZENTHE 2015, 379).

VI.5. GLASS VESSELS (Alpár Dobos)

Fragments of four glass vessels were discovered in the cemetery from Ernei, in graves 4, 10, 54 and 63. Due to the secondary opening of the graves, the original position of the glass objects can be inferred in only one case. The beaker in grave 54 was found in the south-west corner of the grave, situated on a step together with a ceramic jug and an ovoid vessel. It was presumably placed on the mouth of the jug along with the smaller vessel. The beaker probably broke into pieces under the pressure of the earth and ended up inside the jug. In grave 10, shards of glass were found in a secondary position in the western part of the burial, near the skull (Pl. 6/10.1). Only one fragment indicates the presence of a glass vessel in grave 63 and a few small fragments in grave 4. These come in both cases from the fill of the reopening pit, so their connection to the burial is probable, but not conclusive.

The vessel of grave 10 contained only tiny fragments of a few millimetres (probably broken when the grave was opened), which unfortunately are not suitable for further analysis.

Both the beaker from grave 54 and the rim fragment from grave 63 are made of yellowish olive glass, a typical shade of the so-called HIMT glass with high iron, manganese and titanium content (Nenna 2014, 181). This type of glass was very popular and widespread between the 4th and 7th centuries AD, when the primary workshops producing raw HIMT glass operated probably in Egypt (Nenna 2014; Freestone et al. 2018, both with further references). For lack of chemical analyses, the composition of the specimens from Ernei is not yet known; further analyses are required in order to compare them with the increasing amount of available data.

Typologically, the item from grave 54 (Pl. 35/54.2; 47/7) belongs to the high footed beakers of the Eketorp 8 group.[46] The main features of the type are the fire-rounded rim, the conical body, and spiral glass threads applied under the rim and wavy ones on the body (Hunter – Sanderson 1982, 24; Näsman 1984, 145). Ulf Näsman managed to distinguish two groups within the category of the high footed beakers. On most specimens, the spiral glass threads under the rim extend over a wider band and the wavy ones on the body are rounded. By contrast, on a smaller group of beakers, the spiral decoration is narrower, while the lower and upper ends of the wavy lines are sharper (Näsman 1984, 69–70). The piece from Ernei belongs to the second category. The geographical distribution of the two groups also differs: the former is concentrated mainly in Scandinavia, with fewer cases in Central Europe (Näsman 1984, 79–82, karta 8b), while the latter is known mostly from the Middle Danube region (Näsman 1984, 82–83 karta 9b; Tejral 2011, 45). The closest parallels of the beaker from Ernei are known from the northern part of the Carpathian Basin, from Prša (Werner 1959, Abb. 4), Kapušany (Budinský-Krička 1957, 358, no. 6, obr. 1/3), Ghenci (Németi 1967, 506, fig. 4/1; 5) and Nyíregyháza–*Csorda-Páskum II. M3–58 site*, graves 3 and 18–19 (Beck et al. 2021, 113, 9. kép/3, 21. kép and 124, 15. kép/1–2, 24. kép), as well as from Vrchoslavice in Moravia (Tejral 2008, 264, Abb. 3/13; Tejral 2013, fig. 7/4). Outside the Middle Danube region, one specimen comes from Teterow in Mecklenburg (Schmitz-Pillmann 1997, 49, Abb. 2/2) and one from Barsaldershed in Gotland (Werner 1959, Taf. V/2), both of them were grave goods (Fig. 34).

Closely related to the above examples in terms of decorative technique is the group of the slightly lower high footed beakers with oval loops.[47] Such finds were also discovered in the northern part of the Carpathian Basin, at Barabás–*Bagolyvár* (Bóna 2002b, 18, Taf. 1/4; 63/4) and at Tarnaméra–*Urak dűlője* (Bóna – Szabó 2002, 241, Taf. 58/1; 111/2). Due to their small size, the

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46 Also known in the literature as Snartemo type.

47 So-called Barabás–Tarnaméra (Tejral 2008, 264) or Kosino type (Tejral 2011, 44–45). In his study of the glass finds from the Carpathian Basin, Attila Kiss classified both the wavy-lined and the oval looped glasses as type “e”: Kiss 1999, 218, Abb. 2.

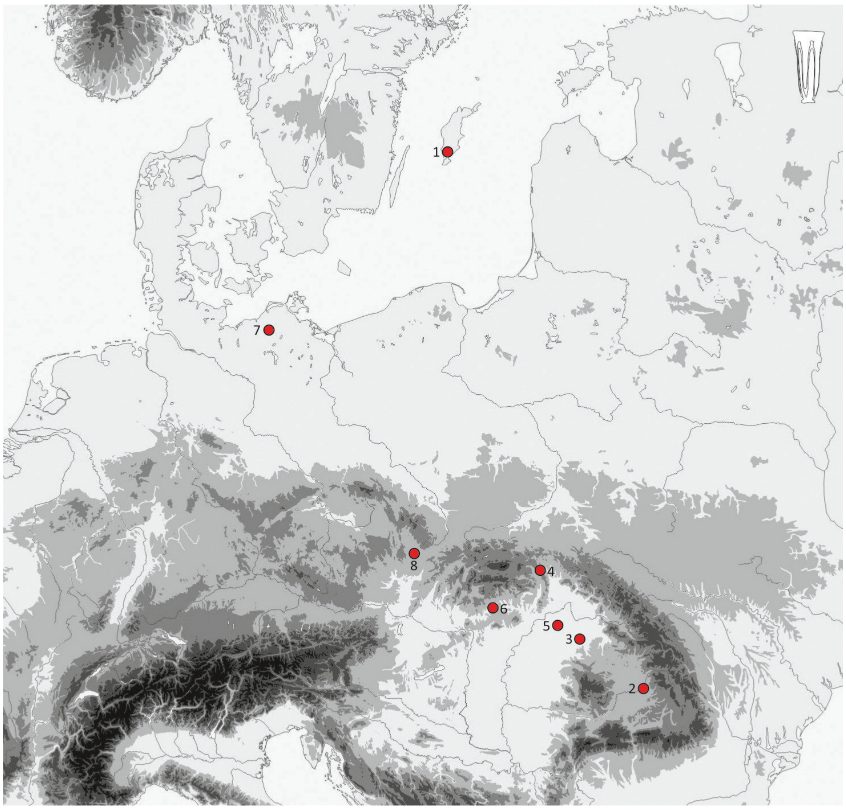

Fig. 34. Geographical distribution of high footed glass beakers with applied wavy glass threads : 1. Barsaldershed; 2. Ernei; 3. Ghenci; 4. Kapušany; 5. Nyíregyháza; 6. Prša; 7. Teterow; 8. Vrchoslavice.

more precise typological classification of the fragments excavated in the settlements is uncertain. In the Carpathian Basin such fragments were discovered at Nitra–*Chrenová III*, feature 3/73 (Pieta 1993, 81, obr. 5/15), as well as at Oberleisberg (Stuppner 1997, 221–222, Abb. 3/2–4, Abb. 6). All the same, their presence confirms the spread of beakers decorated with glass threads in the Middle Danube region.

From a chronological point of view, the type discussed above is datable to a relatively short period: based on the relevant accompanying finds, their use can be dated to the middle – second half of the 5th century (Tejral 2011, 45), broadly speaking to the D2/3–D3 chronological phase. At the moment there is no certain information about the location of the secondary glass-making workshops where these beakers were produced. Attila Kiss identified them as Byzantine imports (Kiss 1999, 218),[48] but the above-mentioned geographical distribution of the glassware has led to the presumption that it might have been manufactured in the area of the Carpathian Basin (Näsman 1984, 83). The likeliness of the latter hypothesis is growing as the number of known finds from the region continues to increase. However, it cannot yet be proven with certainty.

The fragment of the fire-rounded rim from grave 63 (Pl. 38/63.7) was probably part of a beaker, but its small size makes it typologically uninterpretable.

Unlike the beaker from grave 54 and the rim fragment from grave 63, the fragments from grave 4 are made of transparent, colourless glass, some with blue trailed decoration marvered flush with the vessel wall surface (Fig. 35/1). As in the case of graves 54 and 63, in the absence of chemical analyses, one can only rely on known analogies at the moment. In the case of the finds from Bulgarian sites (Dichin, Serdica, Odartsi), it has been shown that all the vessels with blue trailed decoration were made of manganese-decolourised glass (Cholakova 2015, 264). In terms of composition, it corresponds to the "série 3.2" category defined for late antique glass material from southern France (Cholakova – Rehren 2018, 57). This type of glass was widely used in the late antique world (Cholakova – Rehren 2018, 61–62), for all that, it seems likely that secondary workshops producing vessels with blue trailed decoration were active in the Balkans (Cholakova 2015, 312–314).

[48] A similar opinion was expressed by Jaroslav Tejral, who argued that the workshops may have been located in the eastern Roman provinces close to the Danube region (Tejral 2011, 45).

Due to the small number and small size of the fragments, the vessel found in grave 4 at Ernei cannot be typologically defined. The Bulgarian examples show that different vessel types were decorated with blue trails, so this cannot be linked to specific formal categories. From a chronological point of view, they belong mostly to the 5th century (Cholakova 2015, 264–267). In Transylvania, besides the Ernei fragments, a fire-rounded rim with semi-marvered blue trails, probably belonging to a beaker comes from a recently excavated, still unpublished grave (Cx. 93) from Topa Mică (Fig. 35/2). It can be presumed that both might be imports from the Balkans.

The quantity of glass finds from Ernei is relatively high, but one must not exclude the possibility that originally their number may have been even larger and some of them may have been removed when the graves were opened. In this respect, the second half of the 5th century can be regarded as a transitional period, when the use of glass vessels in and around the Carpathian Basin began to decline in comparison with the earlier, Late Imperial Age Sântana de Mureș – Chernyakhov culture, but is much more frequent than later, during the Gepidic/Langobard and Avar periods.[49]

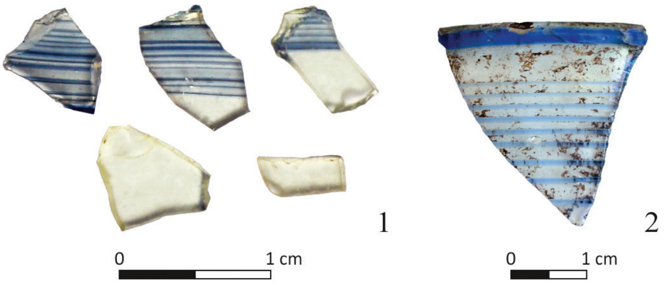

Fig. 35. Fragments of colourless glass vessels with blue trailed decoration: 1. Ernei, grave 4; 2. Topa Mică, grave Cx. 93.

Graves 4 and 54 also contained ceramic vessels. A jug was discovered in grave 4 (Pl. 4/4.2) and a jug and an ovoid vessel in grave 54 (Pl. 35/54.1, 3), the latter placed in the grave together with the glass beaker. The combination of vessels used for storing/serving and consuming liquids is also observable in the earlier Sântana de Mureș – Chernyakhov burials, where depositing larger sets of vessels in the graves was common. This is characteristic for late Roman burials as well, where they can be interpreted as drinking service. In all likelihood, we are dealing with the adoption of this late Roman custom in the Hun Age (Tejral 2010, 84, 106; Tejral 2011, 232–240) and its post-Hun Age 'barbarian' continuation.

[49] Although the number of excavated graves is much higher for both 6th century row-grave cemeteries and the Avar period, the number of glass vessels is negligible (Kiss 1999, 219, 238, Liste 2, 241, Tabelle 1).

VII. CONCLUSIONS

Alpár Dobos, Zsolt Körösfői

The high degree of grave disturbance makes an exhaustive analysis of the cemetery from Ernei impossible, considering that many graves contained neither human bones nor grave goods. The lack of bones or their poor preservation also hinders the reconstruction of the cemetery's structure, as only a few cases allowed for sex and age determination.

Due to the poor condition of the human bones, anthropological examination was only able to determine the sex of three individuals. Graves 25 and 48 belonged to males; burial 43 belonged to a female. However, the objects placed next to the deceased are also helpful in distinguishing their sex. Grave 43, identified as a female one, contained a spindle-whorl and so did grave 23. The nature of the object suggests that the latter burial probably also belonged to a female individual. Graves 9, 59 and 48 contained weapons, indicating that men were buried here, the latter also confirmed by anthropological analysis. Beads and iron knives are less strongly gender-related, but the graves with beads are more likely to belong to women, while knives more often accompanied men. Interestingly, the majority of anthropologically analysable graves belonged to children, although their bones are generally less likely to be preserved. For the moment, there is no precise explanation why more than half of preserved human skeletons from Ernei belong to children.

The secondary opening of the graves shows that although some were disturbed relatively early after burial, and others somewhat later, the reopening occurred in all cases after the soft tissues and tendons had decayed and the bones were no longer connected. Several signs indicate that even those graves that were disturbed later after burial were visible on the surface at the time of their reopening, with the perpetrators aiming at them deliberately (either on the whole or only on the upper part). In several graves the lid of the coffin may still have been intact at the time of opening. As regards their later fate, it is important to note that the upper part of some of the graves was probably naturally backfilled. This may indicate that the cemetery, or rather part of it, was no longer in use at the time of the opening of the graves.

The disturbed burials and the incomplete funerary goods provide a rather fragmented picture of the onetime archaeological reality. This situation has therefore only permitted observing trends rather than making factual statements.

Chronology

The presumably large quantity of grave goods taken out during the grave reopening also limits the possibilities of the cemetery's chronological analysis, as relatively few chronologically valuable objects have survived. The high rate of graves without inventory allows only for a

hypothetically determined period of use, based on the few datable burials. The internal chronology of the cemetery cannot be reconstructed due to the same reason.

Of the chronologically relevant graves, the only undisturbed burial stands out. Most of the finds from the female grave 43 (Murga-type jug, comb, oval buckles, bracelets with thickening ends) can be traced back to Hun Age traditions, broadly dated to the D2–D3 chronological phase. The pair of bow brooches with chip-carved decoration, found on the shoulders of the deceased is, on the other hand, an object typical of the second half of the 5th century, although the high technical level of its execution suggests that it is an early specimen. On this basis, the most probable date for grave 43 is chronological phase D3. The relatively well-dated finds from the other graves also point towards the D2/3–D3 period. These include combs with semi-circular handles reminiscent of archaic shapes, Murga-type jugs and their imitations, the cicada brooch from grave 22, the footwear buckles from grave 46, the spiral ring from grave 11, and the glass beaker from grave 54. Even if most of the beads belong to widespread types that were popular for a long period of time, some of them reached the peak of their use between the late 4th and the first two thirds of the 5th century (e.g. the crumb beads, mosaic beads, amber beads with linear decoration).

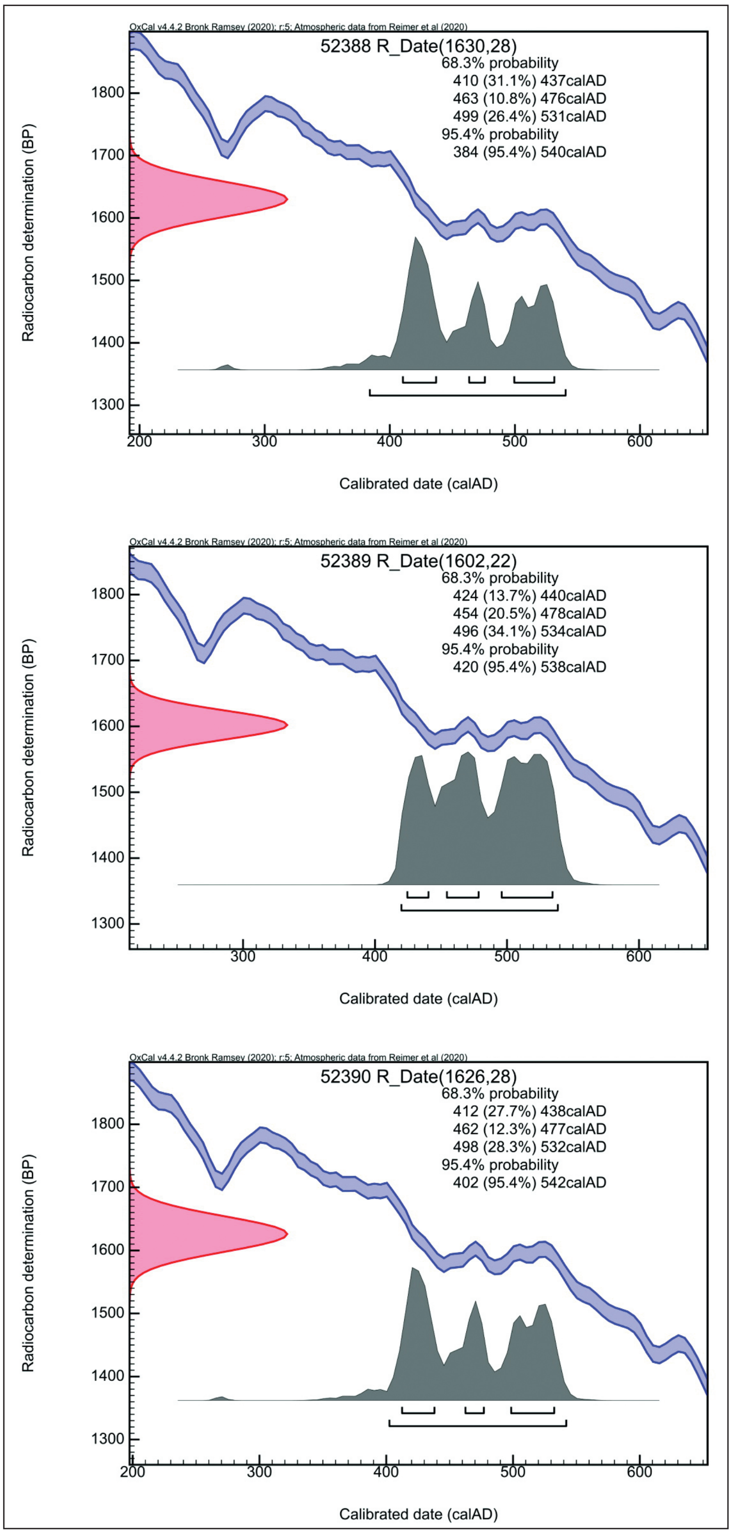

Fig. 36. Radiocarbon data of graves 43, 46 and 48 (after Dobos – Klevnäs 2023 [in press])

It is important to note that none of the cemetery's grave goods support a later date, so according to available evidence, the use of the cemetery did not extend into the 6th century. The date of the cemetery's opening is difficult to infer, but it cannot be excluded that it could already have taken place at the end of the Hun period, sometime before the middle of the 5th century. This suggests that the cemetery was used for a strikingly short period, broadly speaking mid to third quarter of the 5th century. Evidence

of radiocarbon dating does not contradict this hypothesis. Due to the poor preservation of the bones, only three burials provided samples of sufficient quality (graves 43, 46, and 48), and all of them were dated between the Hun period and the first decades of the 6th century (Fig. 36).[1]

The above chronological classification is significant because this period is characterised by solitary graves and small grave groups in the Central Danube region (Tejral 2008, 257; Tejral 2012, 118–120), so the cemetery from Ernei with its 70 graves differs from the trends of the period. However, it is by no means an isolated or unique phenomenon, as there are a number of larger cemeteries, albeit few (Tejral 2008, 257; Tejral 2012, 120). In terms of structure and characteristics, the cemetery bears the traits of the later, so-called row-grave cemeteries, which began to spread in the region after the D3 period.

The circumstances of the emergence of the row-grave cemeteries and their quick spread in the Tisza region and Transylvania have been relatively ignored by former research. The international archaeological literature is dominated by the view that this type of cemetery developed in northern Gaul in the mid–5th century or shortly afterwards, and spread rapidly through European areas inhabited by Germanic people, thus becoming the dominant cemetery type of the Merovingian period.[2] The emergence of the row-grave cemeteries in Gepidic territories is most probably related to the relative political and social stability provided by the Gepidic Kingdom after the turbulent Hun period, which resulted in the establishment of settlements and, consequently, cemeteries used for several generations. Although this burial phenomenon was widespread in Europe, in the Central Danube region, it also incorporated earlier elements, characteristic for the Hun Age (Rácz 2016). Based on archaeological finds, the occurence of this cemetery type in the Tisza area is broadly dated to the second half of the 5th century (Nagy et al. 1998, 122; Bierbrauer 2006, 196–197). As far as Transylvania is concerned, there is, for the time being, a certain amount of uncertainty due to the current state of research. Margit Nagy argued that the emerging of the Transylvanian row-grave cemeteries occurred after that of the ones from the Tisza region, at the turn of the 5th and 6th centuries (Nagy et al. 1998, 122). However, in the light of more recent data this is likely to have happened slightly earlier (Kiss 2015, 96; Dobos 2019, 113–114; see also Lăzărescu 2019, 101–102).

Cultural relations of the cemetery from Ernei

Looking at the cultural traditions, one of the special features or uniqueness of the cemetery are the five bone combs. Their peculiarity lies in the fact that none of them belong to the well-known and widespread double-sided combs found in cemeteries related to the one from Ernei, but they all represent a variant of the Thomas type III with a high semicircular handle. Although combs of a similar shape were produced in Pannonian workshops until the mid–5th century (Cnotliwy 2010, 181), and the animal-shaped specimens discovered in Transylvania may have been imported from there (Ottományi 2001, 53), combs resembling the ones from Ernei were in fashion a good half century earlier. Lobed backed combs were a popular toiletry tool of the Sântana de Mureş

[1] Dobos – Klevnäs 2023 [in press]. ^{14}C dating was carried out by the Curt Engelhorn Zentrum Archäometrie in Mannheim within the project *Att handskas med de döda. Tro och tvist i Europa efter Rom (450–750 e. kr.) [Interacting with the dead. Belief and conflict in Early Medieval Europe (AD 450–750)]*. We are indebted to project manager Alison Klevnäs.

[2] Early research (Werner 1950; Böhme 1974, I, 195–207) considered the settlement of Germanic communities in Gaul that resulted in the emergence of graves containing armed men and women with brooches, typical of the later row-grave cemeteries (for a detailed history of research, see Fehr 2008, 69–97). Later, this ethnical interpretation met criticism that focused mainly on social transformations, independent of ethnicity (e.g. Halsall 1992; Effros 2003, 192–195; Fehr 2008; Theuws 2009; Fehr 2010, 681–783).

– Chernyakhov culture in the 4th century AD, and are one of the leading archaeological finds related to the Goths' and their allies' migration to western Europe in the early to mid–5th century, also known from historical sources. The shape and the ring-and-dot decoration of the specimens from Ernei makes them archaic in their context. The fact that the discovered combs are characteristic exclusively for an earlier period's fashion and no contemporary types have been found, cannot be a coincidence. Neither can one ignore the fact that the cemetery from Ernei, as well as grave 1 with a similar comb from the nearby Sângeorgiu de Mureş–*Kerekdomb* site (Dobos et al. 2021) lie in an area that was dominated less than half a century earlier by the Sântana de Mureş population using the cemeteries from Sântana de Mureş and Târgu Mureş only a few kilometres away. It seems that the people living on the left bank of the Mureş, along the Terebici stream, have preserved or taken over some of the traditions of the earlier period.

The place of manufacture is an important issue not only as far as combs are concerned, but also for the beads and glass beakers found in the cemetery. Research considers the combs to be mainly Pannonian, while the glasses Byzantine imports. However, the increasing number of Transylvanian finds and the 4th century history of the area do not exclude the possibility that they were actually made somewhere in the Carpathian Basin, in the case of our cemetery in the narrower geographical area of Ernei.

An archaic character is visible not only in the case of the combs, but, to a certain extent, also in that of the beads. Most of the bead types identified in the cemetery at Ernei have their antecedents in the Roman Age, both on the territory of the Empire and in the Barbaricum. Compared to the earlier periods, their occurrence is much less frequent in the following chronological sequence, both on Langobard and Gepidic territory.

As for the ceramic finds, only a few intact or fragmentary vessels have been recovered from the heavily disturbed graves (Fig. 37). Less than a quarter of the graves (70:14) contained pottery. The relative scarcity of vessels can only partly be explained by grave disturbance, as similar evidence from other cemeteries of the period shows that the rich and frequent pottery sets known from Late Roman Age burials are no longer typical by the mid–late 5th century. One can state with fair certainty that clay and glass vessels used for storing and serving food and drink were rarely placed with the deceased in Ernei and even then in small numbers in comparison with the sites of the Sântana de Mureș – Chernyakhov sites. The phenomenon of placing pots in graves observed at Ernei is a Late Roman Age tradition that was taken over in the Hun Age and continued after. Compared to the vessel

Fig. 37. Selection of ceramic vessels.

sets of the Late Roman Age, the one or two vessels placed in the graves at Ernei are mostly symbolic in preparing the deceased for the afterlife.

Fig. 38. Photo of grave 43 during the excavation.

In terms of cultural traditions, it is the only undisturbed grave of the cemetery that provides the most information (Fig. 38–39). The funeral garment of a woman in her 30s buried in grave 43 was held together by two brooches on the shoulders. Based on numerous similar grave finds, generally a *peplos*-type dress is assumed in the archaeological literature, pinned by a pair of brooches on the shoulders (Martin 1994, 544; Martin 2002, 206, Abb. 10/1; Bierbrauer 2008, 34), thus lending to the brooches a functional role. The antecedents of this style can be traced back to the Late Roman Imperial Age; it was a common element of women's clothing in the Sântana de Mureş – Chernyakhov culture (Mastykova 2007, 209–210) and spread to the Danube region, Italy, Spain and the Crimea during the 5th century (Bierbrauer 2008, 34). The first half and middle third of the 5th century is dominated in the Carpathian Basin by clothing fastened with one fibula on each shoulder. In the second half of the century this practice starts to fade and declines significantly towards the century's end, although it does not disappear completely (Rácz 2016, 315, Abb. 10).

In grave 43 at Ernei, the two brooches were complemented by a pin placed transversally on the thorax. In 5th-century female graves, it is not possible to distinguish typologically between hairpins and dress pins, their function being determined solely by their position in the grave. The specimen from Ernei was buried as a dress pin. In the middle third of the 5th century, dress pins usually appear in pairs and replace the brooches (for more details see Quast 2005, 264–270, 306–307, Liste 3). The pin from Ernei may also have been used instead of a brooch, but unlike the known examples, it did not replace a pair worn on the shoulders, but was used to fasten the clothing under the neck/on the chest.

Garments 'with three brooches' are not unknown in the period, but are quite rare.[3] Usually, the brooches on the shoulders form a pair, while the third piece belongs to a different type. The early variants of garments 'with three brooches' can already be found in the Central European Barbaricum during the Roman Imperial Age (Martin 1995, 664; Böhme 1998; Quast 2005, 278) as well as in the Sântana de Mureş – Chernyakhov environment, although in the latter case significantly less frequently than the variant with two brooches (Mastykova 2007, 209, fig. 7/1). From the D1 period (end of the 4th century – beginning of the 5th century), such brooch combinations are known in the southern part of the Great Hungarian Plain from grave 127

[3] The most detailed summary to date is that of Dieter Quast, who collected 14 definite occurrences dating from the 5th and 6th centuries (Quast 2005, 308–309, Liste 4, Abb. 33).

at Csongrád–*Laktanya* (Párducz 1963, 48–49, Taf. VII/17–18, 22), in the Upper Tisza region from graves 18[4] and 19 at Tiszadob–*Sziget* (Istvánovits 1993, 100–103, 114–116, Abb. 8/1–4; 9/1–4) and from grave 4 at Tiszavalk, the latter with three different types of brooches (Garam – Vaday 1990, 176–182, Abb. 6/1–3).

Fig. 39. Grave 43, selected finds.

A few female burials with three brooches, contemporary with grave 43 from Ernei, are known from the Central Danube region. The combination of a pair of large silver plate brooches and one with inverted foot was found in grave 32 at Smolín (Tejral 1973, 26–31, Abb. 4/3–4, Abb. 5/6), as well as in the female burial in Tiszalök (L. Kovrig 1951, 113, 1. kép, XLIII. tábla/4, XLIV. tábla/1–2). A pair of small size, Bratei-type brooches and an iron fibula with inverted foot are known from the female grave in Vranja (Mastykova 2018, 395, fig. 1/2–4; 3/1–3). In the grave excavated at Tápé-Lebő, the assemblage was formed by the combination of three different types of brooches (one of Bratei type and one with inverted foot on the shoulders, a large iron fibula on the chest) (Párducz 1959, 328–329, Taf. XVIII/1–3). Outside the Central Danube region, clothes with three brooches are known from Lezoux in France (Kazanski et al. 2022, 128, fig. 1/1–9) and the North-African Carthage-Koudiat Zâteur (Eger 2001, 353–363, Abb. 4/1–3; Quast 2005, 273, Abb. 28/1–3) (Fig. 40). Later examples were found in a few Visigothic period burials from Hispania (Ebel-Zepezauer 2000, 126–127; Quast 2005, 278, 308, Liste 4/2–5). It is important to note that, based on the elements of clothing, these burials show a close connection with the mid–5th century Danube region.[5]

[4] The grave was heavily disturbed, so the original position of the brooches cannot be reconstructed.

[5] For Danube region links of the brooch from Lezoux, see most recently Kazanski et al. 2022, 128. The traditional view considers that clothing with two and three brooches was brought to the Iberian Peninsula by eastern Germanic, mainly Visigothic 'immigrants', and spread more widely among the population in the late 5th – early 6th century

It is not entirely clear what purpose the third brooch served in the above cases. The most common view is that the sleeveless *peplos*, fixed on the two shoulders, was accompanied by a cloak-like garment, which may have been fastened by the third fibula below the neck or in the area of the chest (Martin 1994, 544, Taf. 25/3; Bierbrauer 2008, 34, Taf. 1/1).[6] This reconstruction assumes that at least one of the brooches on the shoulders was invisible, as it was covered by the cloak. However, given the representational role of the brooches, they were likely positioned so as to be clearly visible (Quast 2005, 280). The possibility of the brooches situated on the shoulders fastening a shroud-like mantle has also been raised (Bierbrauer 1975, 75–76; von Rummel 2007, 276), while Dieter Quast (2005, 282) considered the likelihood of the third brooch being used in some cases to attach a headscarf or veil.

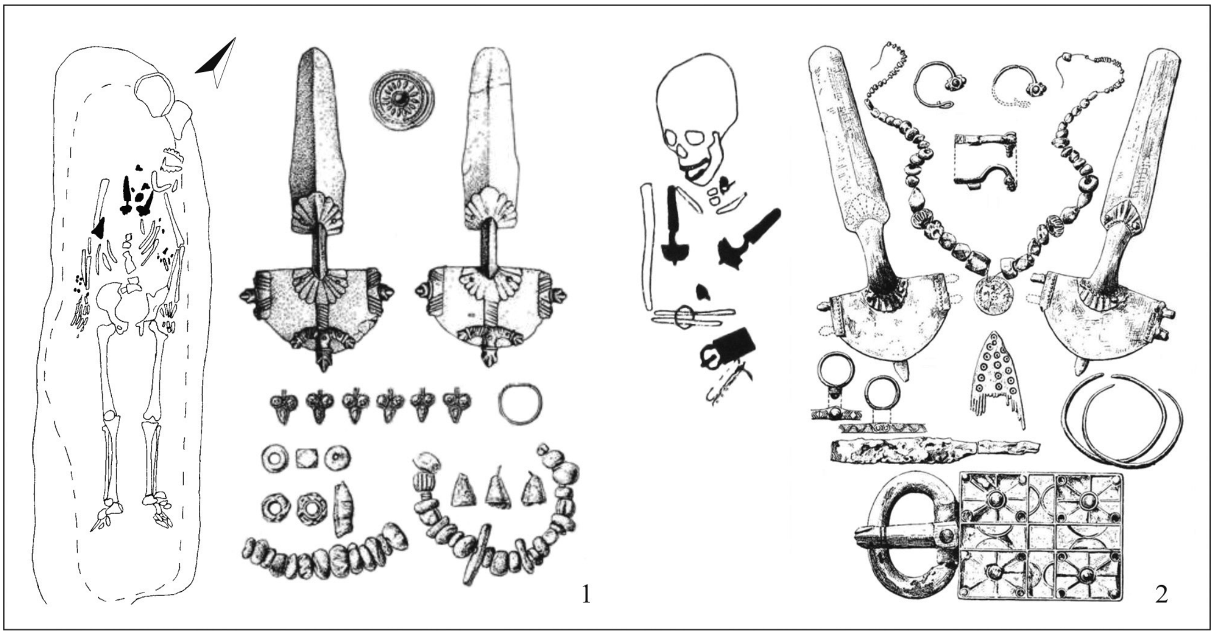

Fig. 40. Examples of female burials with three brooches: 1. Lezoux (after Kazanski et al. 2022, fig. 1/1–9); 2. Duratón (after Ebel-Zepezauer 2000, Abb. 46/1 and Pinar Gil 2012, fig. 7/1).

In the absence of written sources, contemporary depictions or reliable textile remains, the reconstruction of clothing is based exclusively on the metal pieces preserved in undisturbed graves and their position within the grave. Although some regularities can be detected (e.g. dress with two or three brooches), it is likely that the use of brooches was more varied than often assumed by archaeology. It is therefore conceivable that the brooches discovered around the neck or chest did not always serve the same purpose (Quast 2005, 279–284; von Rummel 2007, 285–286). In addition to the above possibilities, one cannot exclude that the third brooch was holding together the open front of a garment.

In line with the fashion of the period, the dress in grave 43 was accompanied by a waist belt, fastened with a buckle with plate. The situation is complicated by the fact that two buckles of the

(for the assumed process and chronology, see Pinar Gil 2012; Kazanski et al. 2022). The garment with three brooches of the burial from Carthage-Koudiat Zâteur has also been interpreted as an alien, Danubian element and has been associated mainly with the Vandal expansion in North Africa (Eger 2001, 378–389, especially 383; Quast 2005, 278–284; for the critique of this theory and a dissenting opinion, see von Rummel 2007, 270–323, especially 319–323). Regardless of the clothing's ethnic relevance, the connection between the above examples and the 5th century Middle Danube region seems increasingly solid.

6 The Imperial Age clothing with three brooches has been reconstructed similarly (Martin 1995, 664–670; Böhme 1998, 435–450, especially 449–450, Abb. 4).

same type and similar size were found in the grave, at approximately 0.10 m distance one from the other. One was located near the lower end of the spinal column, the other on the sacrum, in a very similar position. Their position in the grave suggests that both may have been part of a waist belt, but such a reconstruction implies a double belt, for which no firm parallels are known from the period. The possibility that the specimen on the sacrum served as a purse buckle cannot be completely ruled out, but it seems unlikely given the size of the buckle and the fact that no other objects related to a possible purse have been found in its vicinity (all the objects related to a purse are located in the left hip area).

The most likely possibility seems to be that the two buckles held different pieces of clothing together. A situation similar to that of grave 43 in Ernei (two buckles of similar size near/below each other on the pelvis) has been recorded in only a few 5th century graves, pointed out by Péter Tomka in connection with the grave from Árpás. The majority of the examples cited by Tomka (2001, 175, note 9) come from male graves, some of which also contained a cutting weapon (spatha or short sword), so the role of the second buckle in attaching the sword belt seems plausible, although it cannot be proved beyond doubt.[7] From this point of view, it is the weaponless Árpás grave that is closest to the one from Ernei. Its publisher interpreted the second buckle as a trouser buckle (Tomka 2001, 170, 3. kép, 4. kép/1–2). A similar arrangement of the buckles was observed in the double grave at Báhoň-Kaplná (Bartík 1990, 290–291, obr. 2; 3/4–5).[8] Even less parallels can be drawn with certainty from female burials: one can mention the Gencsapáti/Gyöngyösapáti–*Kápolna hill* grave based on the grave description, but the find circumstances are not entirely clear (Nemeskéri 1945, 303, XCVII. tábla/5). Another example comes from grave 84 of Biharkeresztes–Ártánd–*Nagyfarkasdomb*, uncertainly identified as a female one, in which the small buckle found on the pelvis was also classified as a trouser buckle (Mesterházy 2009, 80, Abb. 5).[9]

Other important elements of the clothing from grave 43 are the footwear buckles. Similar small buckles were found in other graves of the cemetery as well, but mostly in a secondary position, except for two graves (46 and 63). Their interpretation as shoe or boot buckles is uncertain (see Chapter VI.1.f). In any case, their high number is striking, so it is reasonable to assume that at least some of them may have played such a role.

The metal components of footwear (mainly buckles) are typical finds of the 5th century, especially of the Hun period. Their use declined significantly by the end of the 5th century, and they are no longer found in the row-grave cemeteries during the Gepidic Period. The genesis of buckled footwear is disputed, and Sarmatian, late Roman and Persian origins have all

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7 Among these are Szirmabesenyő (Megay 1952, 133, 1. kép, XXV. tábla/3–4), Kecskemét–*Mindszenti-dűlő* (Kovacsóczy et al. 2021, 308, 313, fig. 3/1; 4/2–3), Lébény–*Magasmart* (Pusztai 1966, 101–103, 2. ábra, 3. ábra/1, 3), and Lengyeltóti (Bakay 1978, 151, Abb. 3/1–2; 4/1–2). In the latter two cases, the circumstances of the finds are uncertain, which further complicates the reconstruction of clothing and weaponry.

8 The grave description suggests a similar situation in grave 2 at Laa a. d. Thaya, where the smaller buckle was positioned 0.10 m below the belt buckle (Beninger 1929, 144, Taf. XIX/26–27). Jaroslav Tejral (2011, 202) believed it to be part of the sword belt, but the grave description mentioned uncertain traces of a sword next to the skull (Beninger 1929, 144), therefore such an interpretation of the buckle in question is highly doubtful. A similar situation was observed in the rich grave 2/2006 in Singidunum, where the second buckle was probably not connected to the weapon belt, considering that the sword, together with the other weapons, was placed on the left side of the deceased, detached from the belt (Ivanišević – Kazanski 2007, 117–118, fig. 4). The interpretation of the buckles from Murga is also uncertain. Both Bóna (1991, 281) and Tejral (2007, 74) considered the larger buckle to belong to a belt, the smaller to a weapon belt, but this interpretation remains questionable.

9 In each of the two graves in Mezőkövesd cited by Péter Tomka, only one buckle was found near the pelvis (Lovász 2005, 50–53, Abb. 3, Taf. 33/2, Taf. 34/1). Their position in the grave suggested that they also might have belonged to trousers.

been suggested (Schmauder 2002, I, 156–160; Tejral 2011, 207–209; both with further references). In the first half and the middle of the 5th century they were widespread both in the East (Kazakhstan, Volga region, Caucasus, Crimea) and in the Central Danube region, occurring in male and female graves alike.[10] Despite their frequent occurrence, there are relatively few well-documented graves where they were discovered in original position. In the Central Danube region, they were usually located around the ankles (Schmauder 2002, I, 351–352, Fundliste 24; Tejral 2011, 202–204).[11]

By comparison, in grave 43 from Ernei, three buckles were found: one on the left ankle and two at the upper end of the shins. In grave 46, the buckle in original position was also found at the upper end of the left shin. No similar situation is known from the Carpathian Basin and its surroundings. In the male grave excavated in the Kecskemét–*Mindszenti hill*, the buckles were located next to the lower third of the shin bones, and according to the finders, they had moved from their original position, so the way of wearing cannot be reconstructed (Kovacsóczy et al. 2021, 309, 314, fig. 3/1; 4/4–5). In south-western Crimea, besides buckles found around the ankle, several specimens were discovered around the mid-shinbone, coming from graves dated in the first half of the 5th century. Elzara A. Khairedinova (2003, 134, ris. 5/II–IIa, IV–IVa), who has studied the subject in detail, reconstructed in such cases a mid-calf boot, held together with a buckled strap. Another distant parallel might be the male grave from Beljaus. In this case the reconstruction of the footwear is questionable: a buckle was discovered at the left knee, a pair of buckles at the right shin and left foot, and two further buckles at the feet (Zasetskaya 1994, 179, Tab. 26/8, 10–11, 15–16; Kazanski 2022, 130, ris. 1/1, 8, 10, 16–18). In lack of firm parallels, one might consider long boots in the case of graves 43 and 46 in Ernei, or possibly a footwear with textile or leather straps fixed below the knee.

On the whole, grave 43 fits into the 5th century Middle Danubian material, both in terms of the typological characteristics of the grave goods and the reconstruction of the clothing. For the most part this is the case for the finds from the entire cemetery, even if it is impossible to reconstruct the funerary dress from the rest of the burials due to the intensive grave disturbance. Coined by Michel Kazanski (1990) "*mode danubienne*", the material culture from the Middle Danube region, defined mainly by the find combinations of female graves (Rácz 2016), in which brooches situated on the shoulders played a central role, has been linked by several researchers to the East Germanic communities ("*ostgermanische Koine*": Bierbrauer 2006, 191–192; Bierbrauer 2008, 33–43; "*donauländisch-ostgermanische Kulturgruppe*": Tejral 2007, 62; Danubian–Eastern Germanic cultural complex: Tejral 2012, 116–123; for a critique of ethnic interpretation, see Gauss 2009, 40–65). Although several attempts have been made (e.g. Kiss 1979; 1983; 1996b), it is not possible to isolate the Danube region's individual ethnic groups mentioned by written sources (Bierbrauer 2008, 43–48). This is also true for the Gepids (summarized in Bierbrauer 2006; Kiss 2015, 70–72, 86–101), who deserve special attention from the point of view of the cemetery from Ernei and Transylvania in general.

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[10] Footwear buckle finds of the Hun Age were listed by Péter Tomka (2001, 175–176, 10. jegyzet) and later complemented by Károly Mesterházy (2009, 86).

[11] Schmauder's list can be supplemented by additional, subsequently published finds: Balatonszemes–*Szemesi berek*, grave 150 (Bondár et al. 2000, 97, I. tábla/4–5); Biharkeresztes–Ártánd–*Nagyfarkasdomb*, graves 43, 57 and 84 (Mesterházy 2009, 77–80, Abb. 3/2–3, Abb. 4–5); Mezőkövesd–*Mocsolyás*, grave 2 (Lovász 2005, 53, Abb. 3, Taf. 33/3, Taf. 90/3); Nyíregyháza–*Csorda-Páskum II, site M3–58*, grave 3 (Beck et al. 2021, 9. kép/3(65/72), 2); Singidunum, grave 2/2006 (Ivanišević – Kazanski 2007, 117, fig. 4; 5/15–16); Sirmium, eastern cemetery, grave 1 (Popović 2017, 41, pl. 1/1.6); Turda (Bărbulescu 2008, 53–54, 153, pl./Taf. V/1; XV/4–5; XIX/4).

The historical and archaeological context of the cemetery from Ernei

In the light of the above, the historical evaluation of the cemetery from Ernei is quite complex and raises a number of questions from both a macro- and micro-regional perspective. Although the existent data suggest that the cemetery was in use for a short period of time, this is the exact period for which relatively little data is available for Transylvania. Compared to the densely populated area of the earlier, Late Roman Imperial Age (Körösfői 2015b, 303–304; Körösfői 2017, 440–441, Abb. 1), the Hun Period marked a significant demographic decline in Transylvania. The almost total absence of finds dated to the D1 and D2 chronological phases (Harhoiu 1998, 151, 153) cannot be explained solely by the current state of research, but rather reflects the peripheral position of the area in the period (Harhoiu 1998, 153). In this regard, a slow transformation can be observed from the second half of the 5th century onwards, culminating in the 6th century, when larger settlements and cemeteries, used over several generations, became typical (Dobos 2019, 120–122).

Research on the Transylvanian Basin usually explains this process by the settlement of the Gepids. Its starting point is the collapse of the Hun Empire following the Battle of Nedao, after which, according to Jordanes 'the Gepidae by their own might won for themselves the territory of the Huns and ruled as victors over the extent of all Dacia' (Jordanes, Getica 264). The end of the Hun era and the birth of the Gepidic Kingdom, which included Transylvania, must have undoubtedly played an important role in the demographic transformation of the region. However, the archaeological evidence does not allow the reconstruction of a clear west-eastward expansion,[12] since the finds of periods D2–D2/D3 and later D3 are parallelly present in different regions of the Transylvanian Basin (Dobos 2019, 115). A further methodological problem is created by the impossibility to clearly determine whether certain assemblages belong to the Late Hun or Early Gepidic periods. Consequently, the significant changes in the Transylvanian demography and settlement structure following the fall of the Hun Empire must be interpreted as a more complex process than a one-way migration. A more detailed analysis of the individual micro-regions could furnish important results regarding these issues.

The growing number of Migration Period finds in the Central Mureş region suggests that this area was continuously inhabited from the Late Roman Imperial to the Early Avar Age. Consequently, this micro-region probably played a much more important role in the period than previously assumed. The proximity of the eponymous cemetery of the Sântana de Mureş – Chernyakhov culture (Kovács 1912), as well as that of the partially excavated necropolis in Târgu Mureş–*former Mikszáth Kálmán Street* belonging to the same archaeological culture (Kovács 1915), are not negligible in terms of the antecedents, indicating the importance of the region in the Late Roman Imperial period. The geographical proximity of the sites probably also played a significant role in the survival of the late Sântana de Mureş traditions observed occasionally in the cemetery from Ernei.

The chronological phase D1 (late 4th – early 5th century) is represented by feature G27 at Ernei–*Carieră*, in the vicinity of the cemetery (Fig. 5). It is thought to belong to an early Migration Period settlement (Crişan – Lăzărescu 2010). From the D2 period, i.e. the 'classical' Hun Age (first half of the 5th century) only scattered finds are known so far. Among them, the gold cicada brooch from Dumbrăvioara stands out (Hampel 1905, II, 7–8, III, Taf. 9/3a–C; Harhoiu 1998, 174, Taf. XC/C). Its punched decoration links it to the Untersiebenbrunn-Coşoveni circle

[12] According to the general opinion, the settlement of the Gepids in Transylvania started from the Tisza region, with the Gepids first entering through the Meseş Gate into the valley of the Someşul Mic River, where they established an early power centre (Horedt 1958, 80–81; Bóna 1986, 143–146), while the Mureş Valley became more significant from the 6th century onwards (Horedt 1958, 83).

(Harhoiu 2021, 31). Three jugs and a glass beaker from the area of the Târgu Mureş brick factory (Horedt 1955, 675, fig. 15/1–4) probably also belong to this period (Harhoiu 1998, 136).

From the point of view of the Ernei cemetery, the most relevant finds of the micro-region are undoubtedly the graves from Sângeorgiu de Mureş–*Kerekdomb* (Dobos et al. 2021). Two north–south orientated graves were found at the site located at a distance of about 1.7 km from Ernei–*Köles-kert* (Fig. 5). Grave 1 contained a man with an artificially deformed skull and a partial horse. These burial practices can be clearly traced back to Hun Age traditions, substantiated by the Mongoloid anthropologic (Gál 2016, 47–48; Dobos et al. 2021, 334–339) and Asian genetic profile (Neparáczki et al. 2019, 3–4, fig. 1; Dobos et al. 2021, 360) of the individual buried in grave 1. At the same time, the latest funerary equipment indicate that the burial took place after the Hun period, in the second half of the 5th century AD.

The two sites that are geographically close and broadly contemporaneous show the parallel existence of two burial customs, relying on different traditions, within a small micro-region (Dobos et al. 2021, 349–350). While the graves at Sângeorgiu de Mureş show the continuation of burial practices from an earlier period (small group of graves, N–S orientation, partial horse burial), the cemetery at Ernei can be considered a precursor of the next period (larger cemetery, relatively regular rows of graves, W–E orientation). In terms of material culture, elements from both the earlier period (e.g. bone combs, pottery) and new types of objects (e.g. bow brooch in Ernei, gold mount in Sângeorgiu de Mureş) can be found in the graves of each site. This picture shows that the transition between the Hun Age and the row-grave cemeteries of the Gepidic period was a long process, during which the presence of solitary graves, small grave groups, as well as larger cemeteries is to be expected. In the light of recent finds, the Central Mureş Valley may have played a significant role in this process.

By the end of this transitional period, the exclusive form of burial was that of the row-grave cemeteries used over several generations, which, certainly, are the archaeological imprints of a more stable political and social context. In the micro-region, the cemetery of Moreşti and the adjacent settlement belonged to this period (Popescu 1974; Horedt 1979a). From the late phase of the row-grave cemeteries, dated already in the Early Avar period, important archaeological sites are the ones at Band (Kovács 1913) and Târgu-Mureş–*former Mikszáth Kálmán street* (Kovács 1915).

Although no exhaustive micro-regional study regarding the Central Mureş region in the Migration Period has yet been published, the above brief overview suggests that the area was one of the most significant in Transylvania during the period between the Late Roman Imperial and Early Avar Ages, which played an active role in the transformations that took place during the Migration Period. One of the important links in these transformations was the community that used the 5th century cemetery in Ernei.

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ABBREVIATIONS

AAS	Amsterdam Archaeological Studies
Acta	Acta (Siculica), Muzeul Naţional Secuiesc, Sfântu Gheorghe
ActaArchHung	Acta Archaeologica Academiae Scientiarum Hungaricae, Budapest
ActaMN	Acta Musei Napocensis, Cluj-Napoca
ActaPraehistArch	Acta Praehistorica et Archaeologica, Berlin
Alba Regia	Alba Regia, Annales Musei Stephani Regis, Székesfehérvár
AN	Antiquités Nationales, Saint-Germain-en-Laye
Analele Banatului	Analele Banatului, Muzeul Banatului, Timişoara
AnnalesUA, SH	Annales Universitatis Apulensis, Series Historica, Alba Iulia
AnnHN	Annales historico-naturales Musei nationalis hungarici, Budapest
Antaeus	Antaeus. Communicationes ex Instituto Archaeologico Academiae Scientiarum Hungaricae, Budapest.
AnthrAnz	Anthropologischer Anzeiger, Journal of Biological and Clinical Anthropology
AnthrKözl	Anthropológiai Közlemények, A Magyar Biológiai Társaság Embertani Szakosztályának folyóirata, Budapest
Apulum	Apulum, Acta Musei Apulensis, Alba Iulia
ArchAustr	Archaeologia Austriaca, Wien
ArchÉrt	Archaeologiai Értesítő, Budapest
ArchHung	Archaeologia Hungarica, Budapest
ArchKorr	Archäologisches Korrespondenzblatt, Römisch-Germanischen Zentralmuseum Mainz
ArchRoz	Archeologické Rozhledy, Prague
ArhMold	Arheologia Moldovei, Iaşi
Arrabona	Arrabona, a Győri Múzeum Évkönyve
BA	Biblioteca de Arheologie, Bucureşti
BAR	British Archaeological Reports, International Series / British Series, Oxford
BAW	Bayerische Akademie der Wissenschaften, München
BBUF	Basler Beiträge zur Ur- und Frühgeschichte, Derendingen–Solothurn
Beiträge UFM	Beiträge zur Ur- und Frühgeschichte Mitteleuropas, Weissbach
BMM	Bibliotheca Mvsei Marisiensis, series archaeologica, Târgu Mureș / Cluj Napoca
ComArchHung	Communicationes Archaeologicae Hungariae, Budapest
Dacia (N. S.)	Dacia, Recherches et décuvertes archéologiques en Roumanie, I–XII (1924–1948), Bucureşti; Nouvelle série (N. S.), Dacia. Revue d'archéologie et d'histoire ancienne, Bucureşti
DissArch	Dissertationes Archaeologicae ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae, Budapest
DolgKolozsvár (Ú. S.)	Dolgozatok az Erdélyi Nemzeti Múzeum Érem- és Régiségtárából, (új sorozat, 2006–), Kolozsvár
EAZ	Ethnographisch-Archäologische Zeitschrift, Berlin
EJA	European Journal of Archaeology
EphemNap	Ephemeris Napocensis, Cluj-Napoca

Germania	Germania, Frankfurt am Main
HOMÉ	A Herman Ottó Múzeum Évkönyve, Miskolc
HOMO	HOMO, Journal of Comparative Human Biology
IJOA	International Journal of Osteoarchaeology
Jahrbuch RGZM	Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz
JAMÉ	A Nyíregyházi Jósa András Múzeum Évkönyve, Nyíregyháza
JAS	Journal of Archaeological Science, London
JPMÉ	A Janus Pannonius Múzeum Évkönyve, Pécs
KEMK	Komárom-Esztergom Megyei Múzeumok Közleményei
Marisia	Marisia (V–), Studii şi Materiale, Târgu Mureş
Marisia AHP	Marisia, Archaeologia, Historia, Patrimonium, Târgu Mureş
MFMÉ	A Móra Ferenc Múzeum Évkönyve, Szeged
MIMK	Molnár István Múzeum Kiadványai, Cristuru Secuiesc/Székelykeresztúr
MonGermArch	Monumenta Germanorum Archaeologica Hungariae, Budapest
Mousaios	Mousaios, Muzeul Judeţean Buzău, Muzeul Brăilei
OJA	Oxford Journal of Archaeology
PamArch	Památky Archeologické, Praha
PAT	Patrimonium Archaeologicum Transylvanicum, Cluj-Napoca
PZ	Praehistorische Zeitschrift, Berlin
RevBis	Revista Bistriţei, Complexul Judeţean Muzeal Bistriţa-Năsăud
RGA	Reallexikon der Germanischen Altertumskunde
RGA-E	Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde, Berlin – New York / Berlin – Boston
RGF	Römisch-Germanische Forschungen, Mainz / Berlin
SAP	Studia ad Archaeologiam Pazmaniensia, Budapest
SCIV(A)	Studii şi Cercetări de Istorie Veche (şi Arheologie 1974–), Bucureşti
SEP	Studia Epigraphica Pannonica, Budapest
SlovArch	Slovenská Archeológia, Nitra
SMK	Somogyi Múzeumok Közleményei, Kaposvár
Starinar	Starinar, Arheološki Institut, Beograd
StComSM	Studii şi Comunicări Satu Mare
SzMMÉ	Szolnok Megyei Múzeumi Évkönyv
VAMZ	Vjesnik Arheološkog muzeja u Zagrebu
ZA	Zeitschrift für Archäologie
Zalai Múzeum	Zalai Múzeum, Közlemények Zala megye múzeumaiból, Zalaegerszeg
ZfA	Zeitschrift für Archäologie des Mittelalters, Bonn

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edge of grave

bottom of grave / step

reopening pit

black fill (reopening pit)

mixed fill (black earth mixed with yellow clay)

yellow clayey fill (original fill of the grave)

traces of wood / coffin

stone

human bone

ceramics

iron

copper alloy

silver

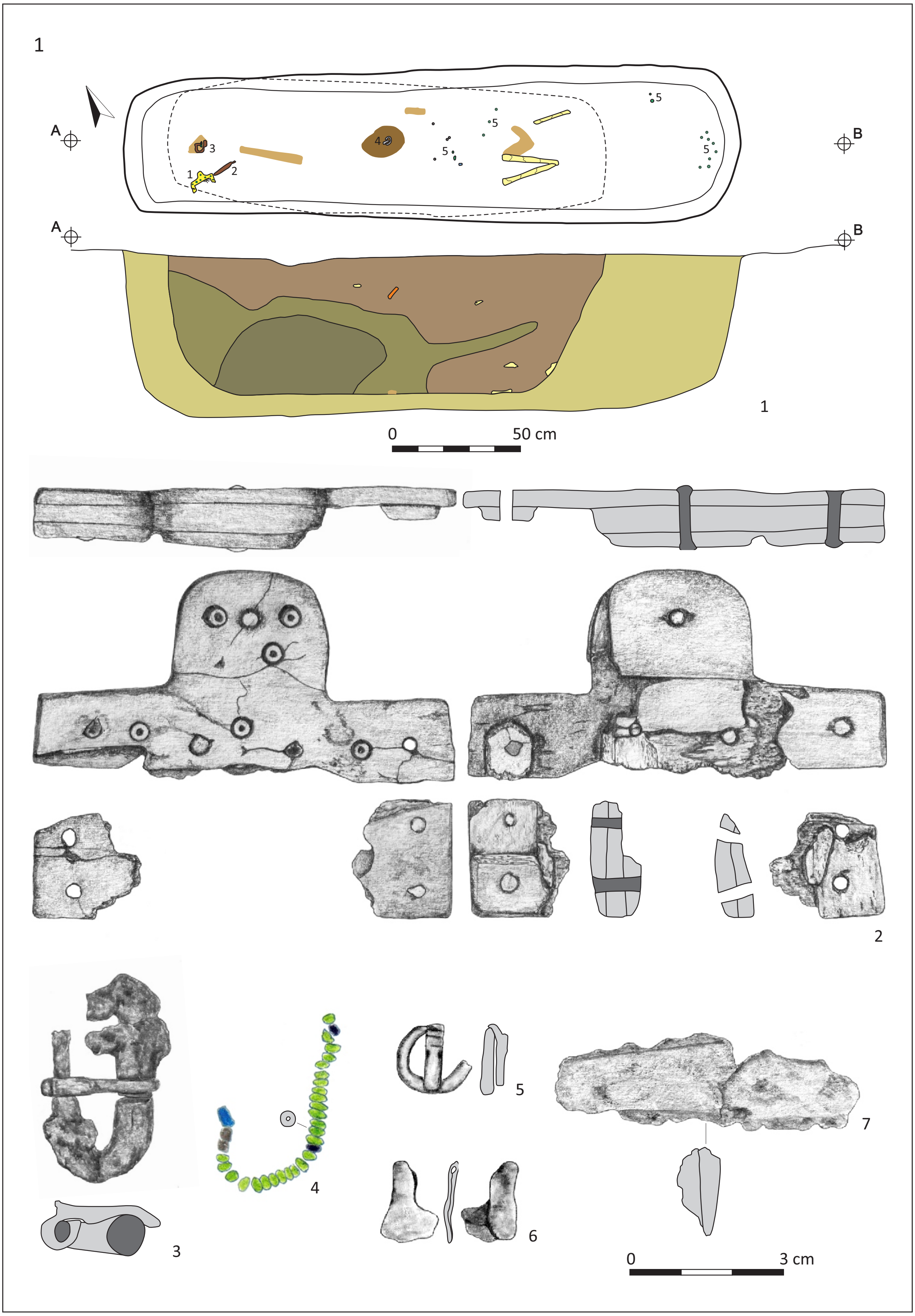
bone

amber

glass

glass beads

adobe



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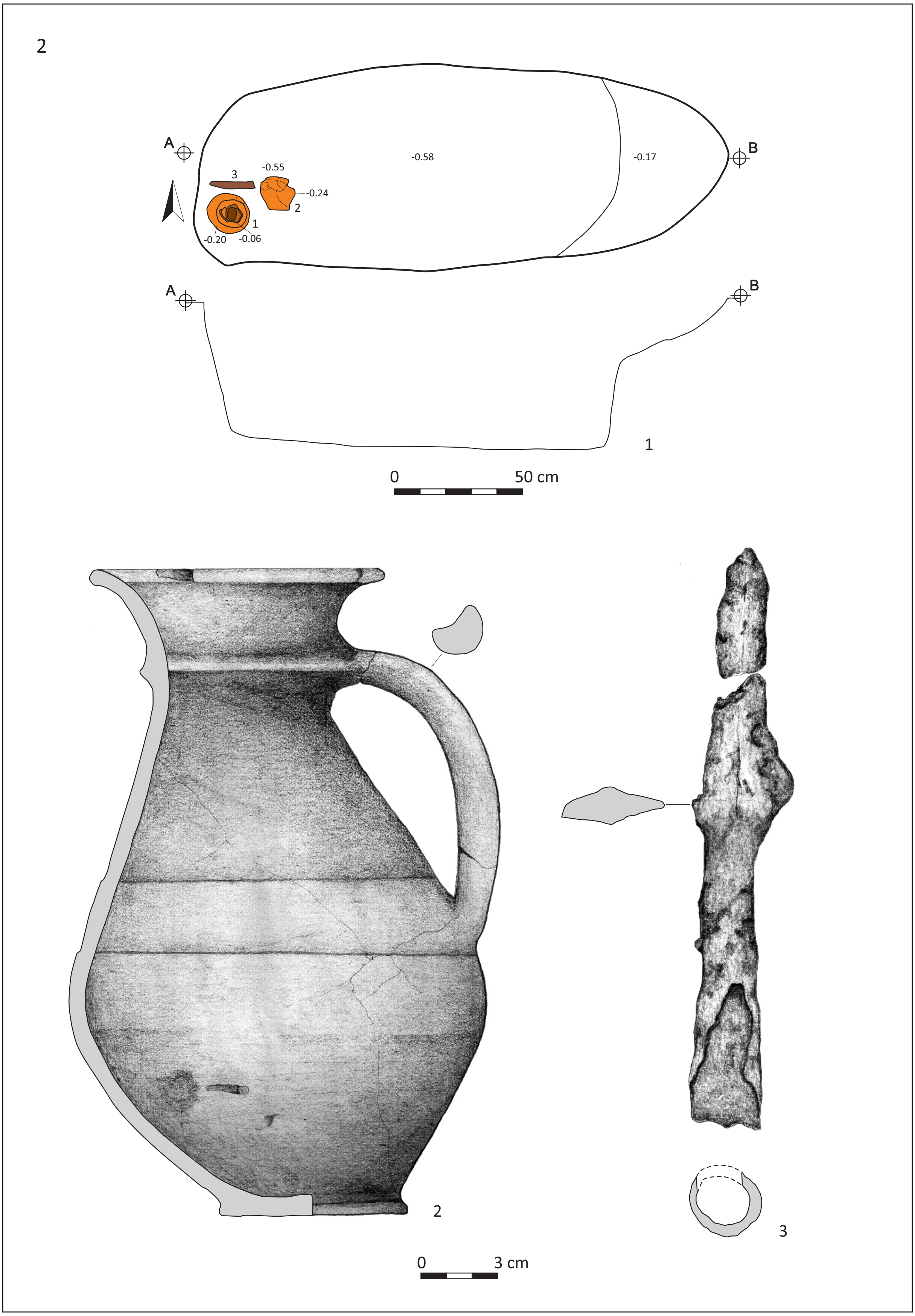

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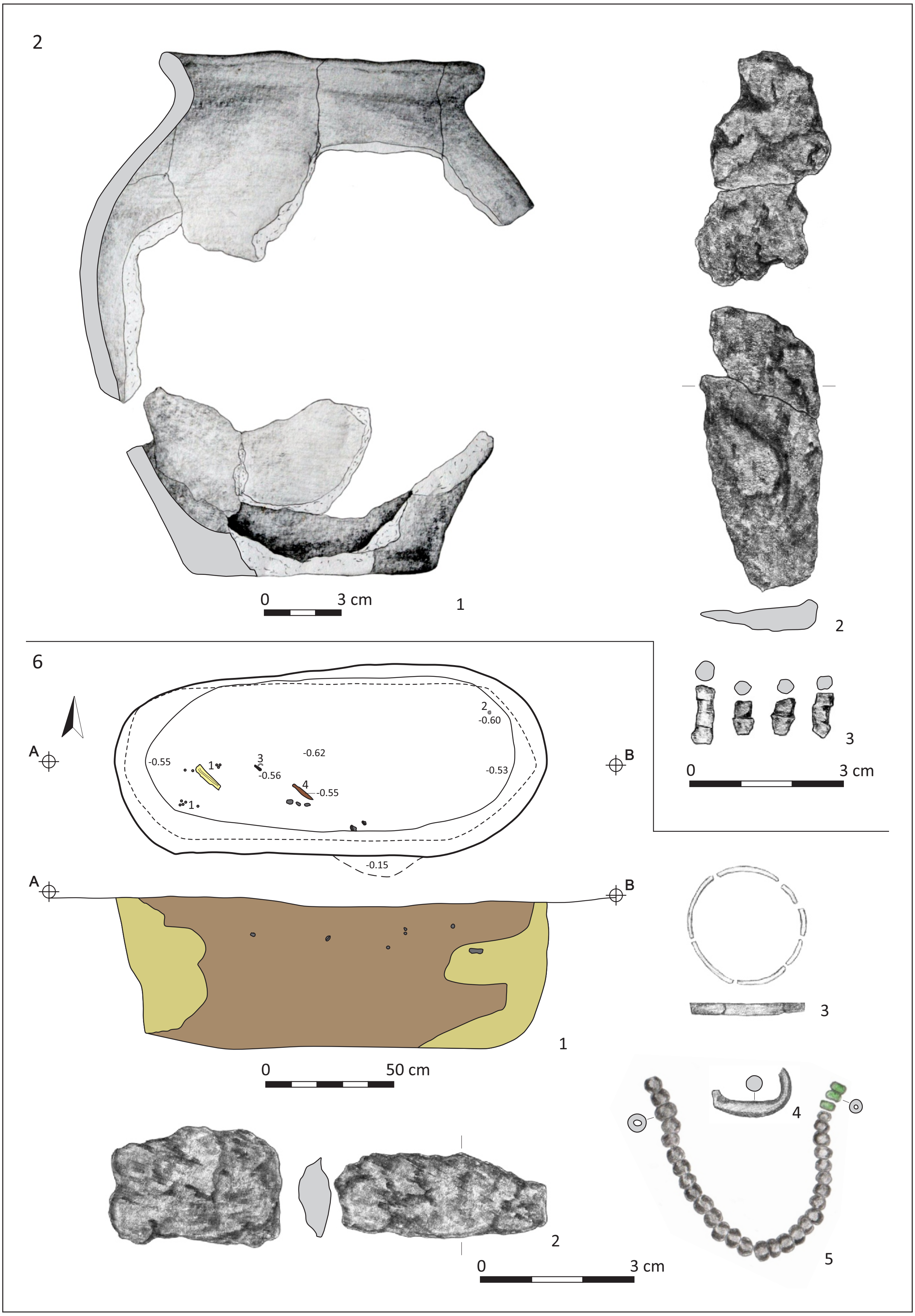

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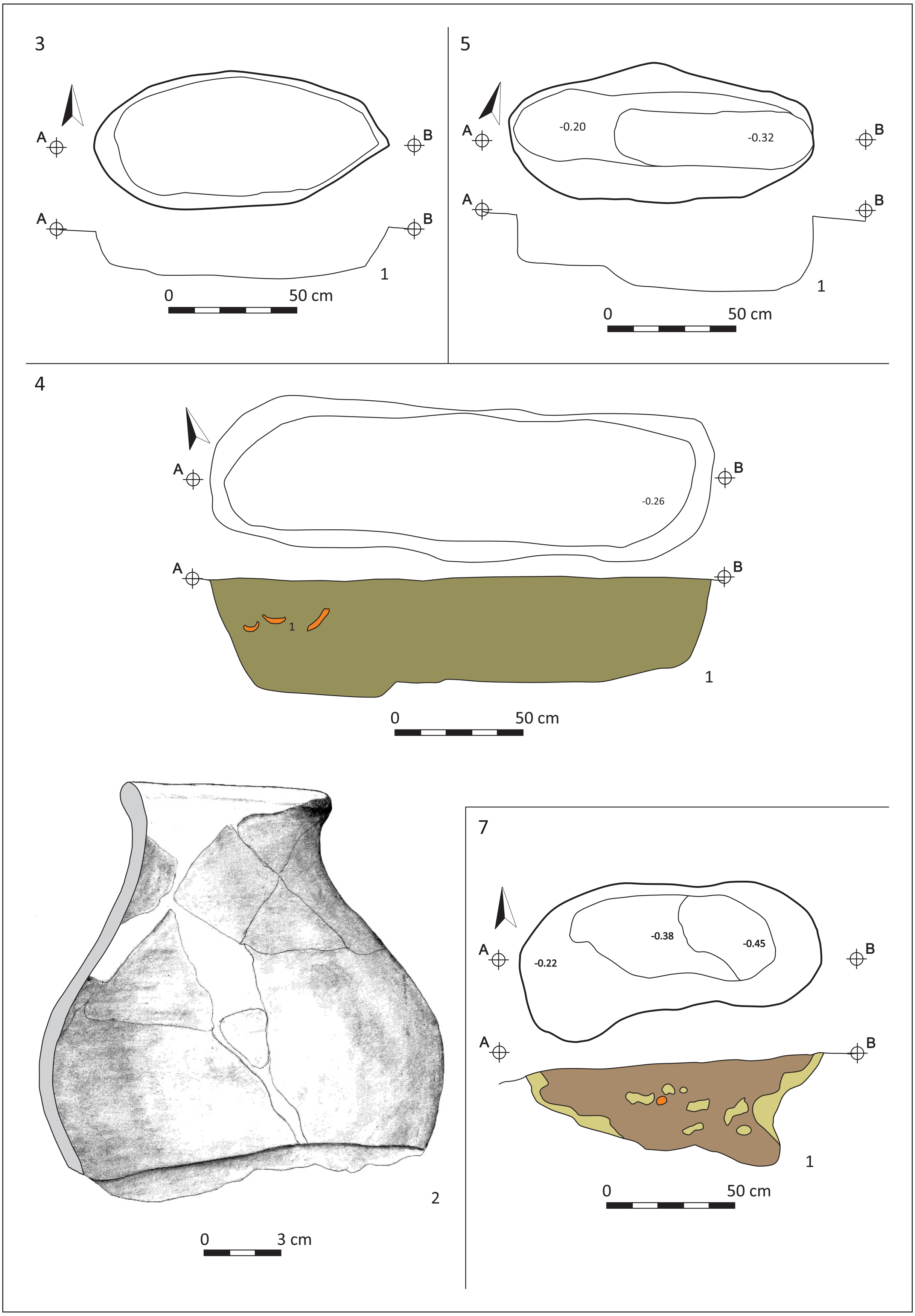

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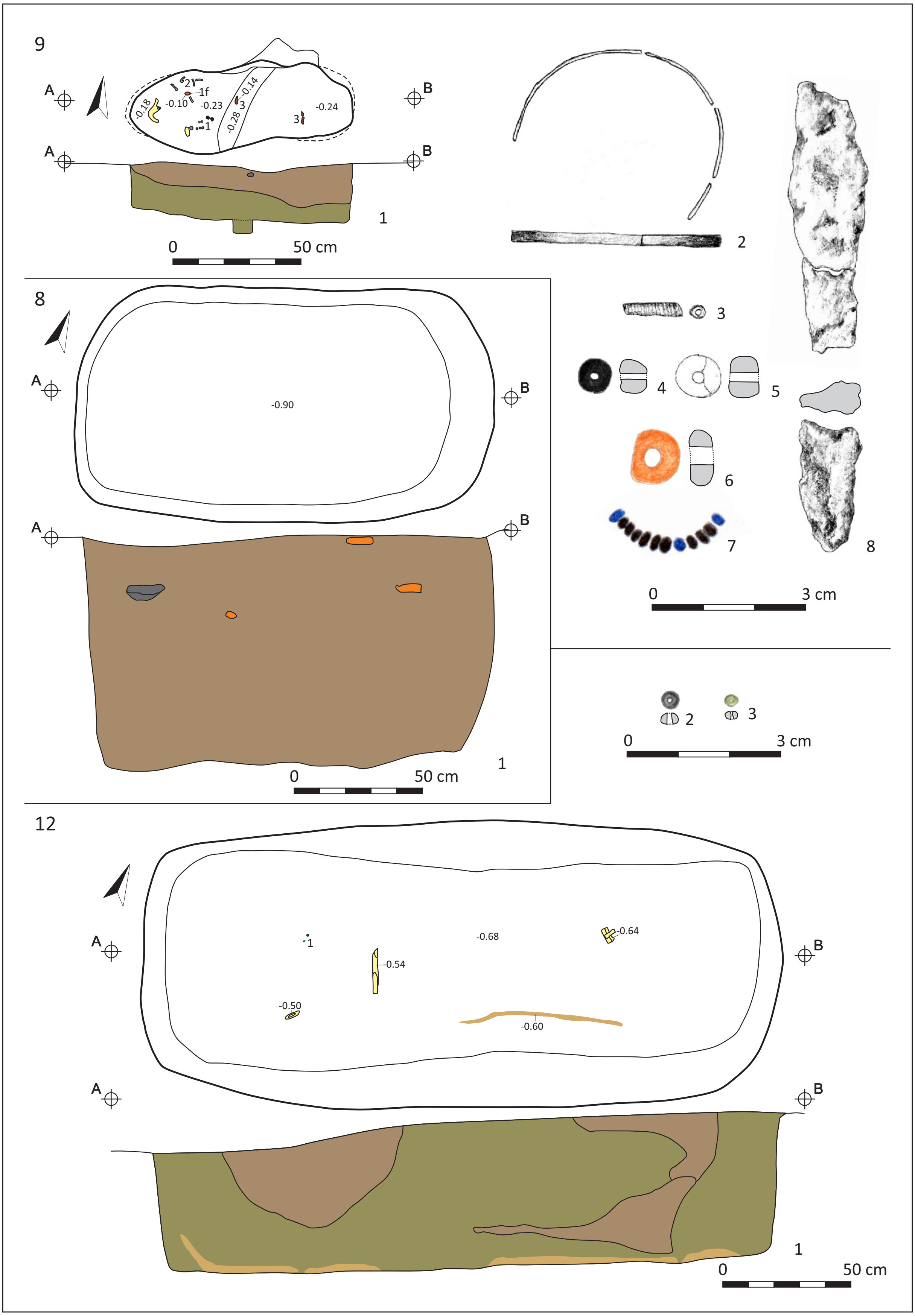

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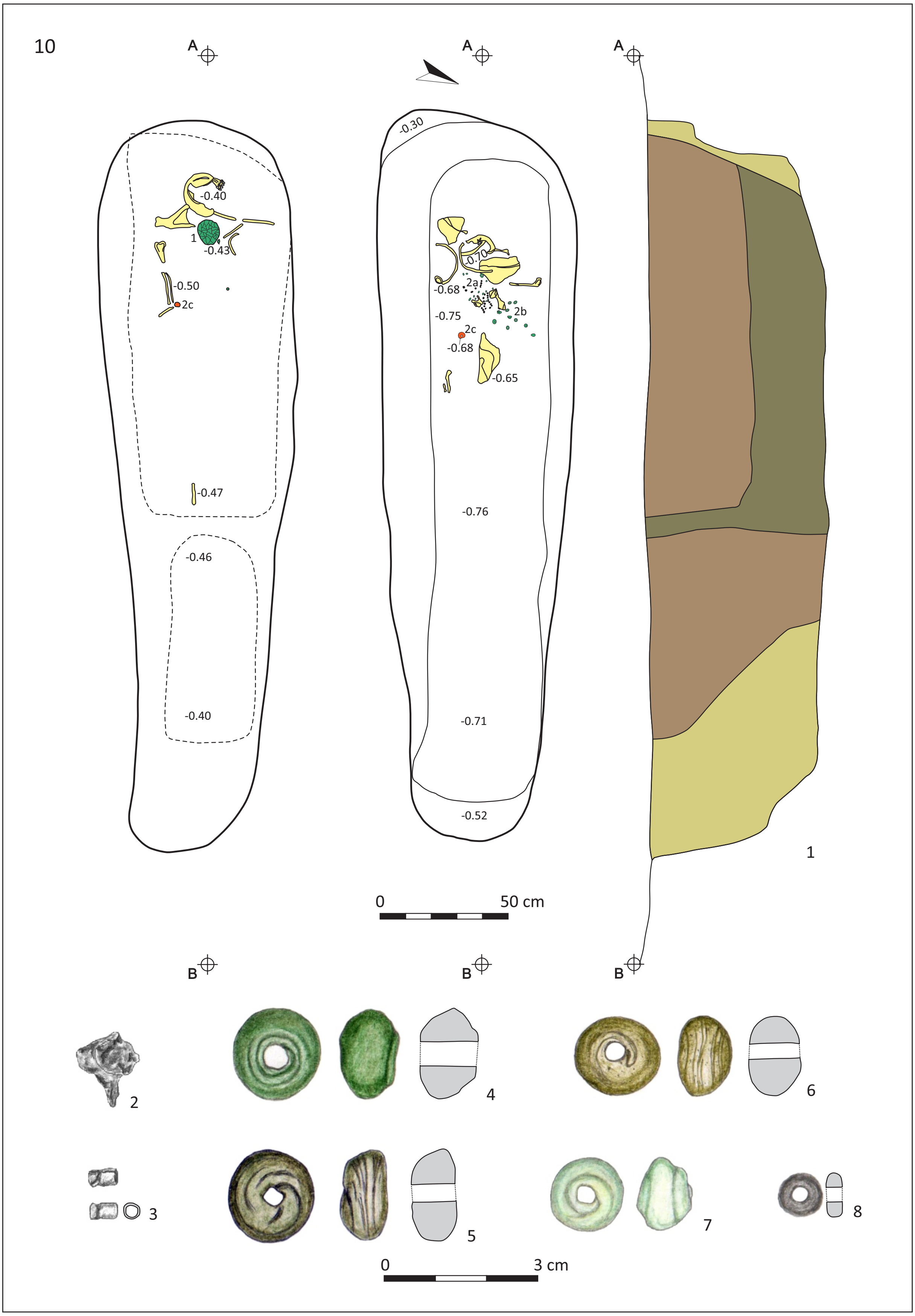

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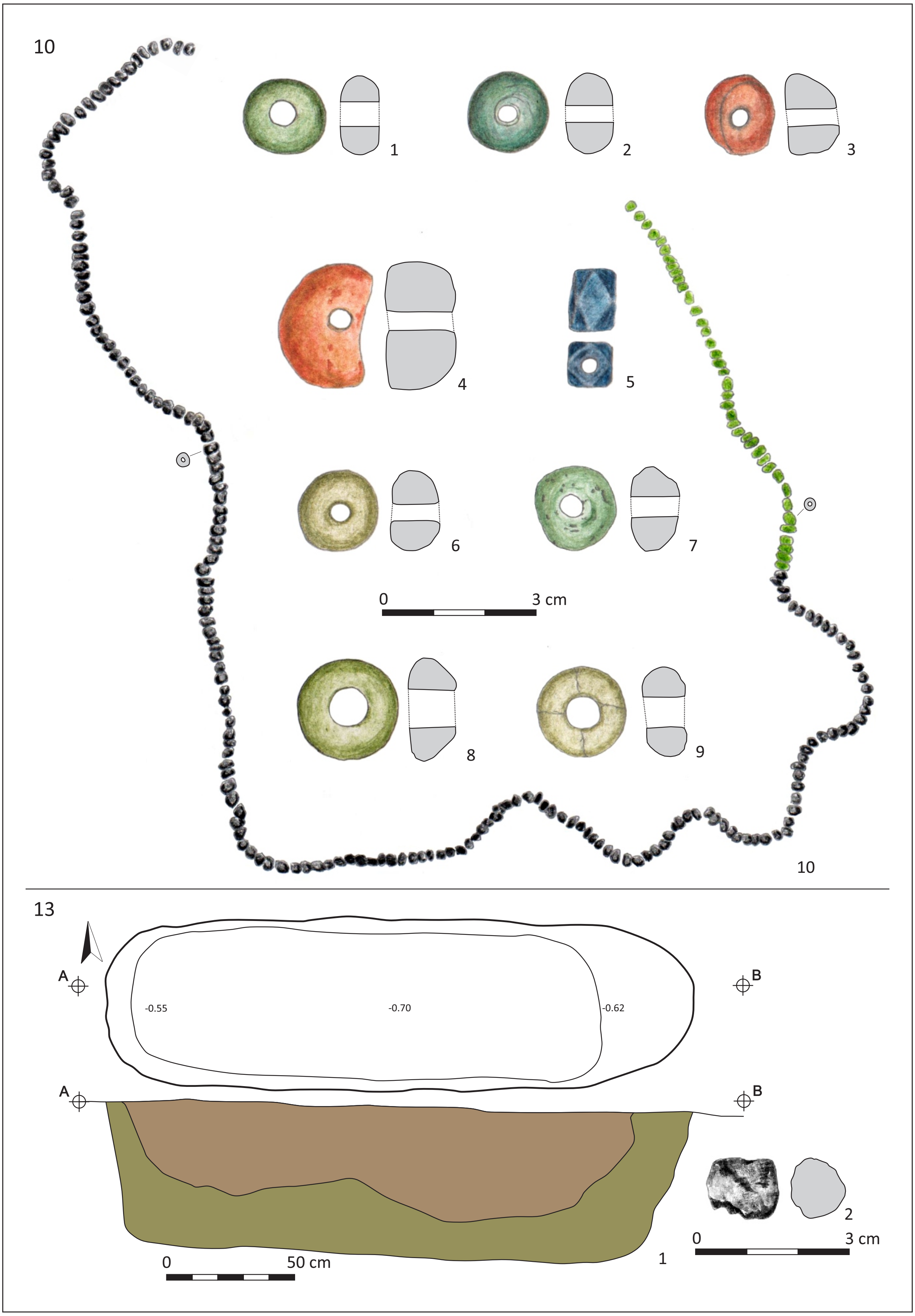

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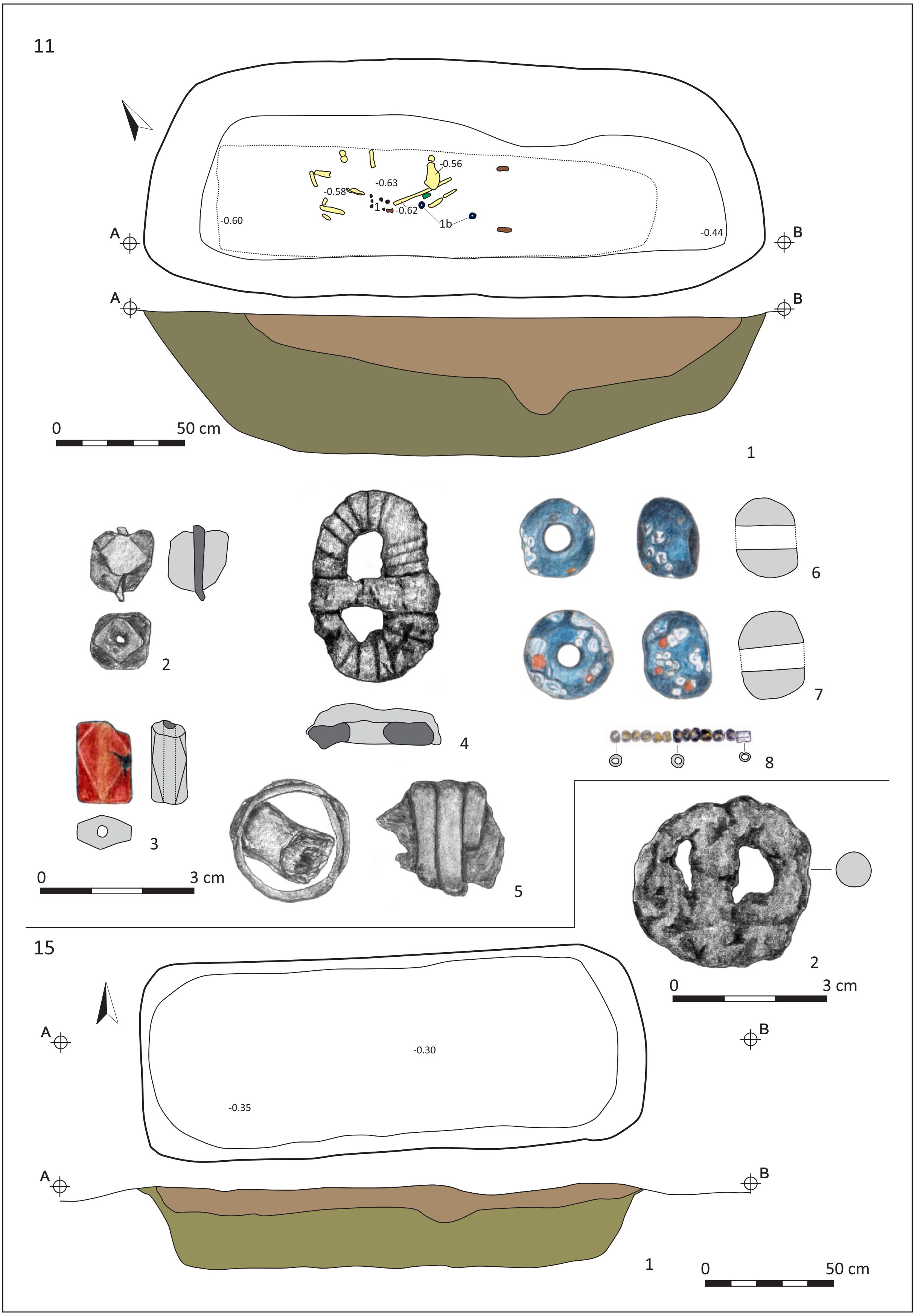

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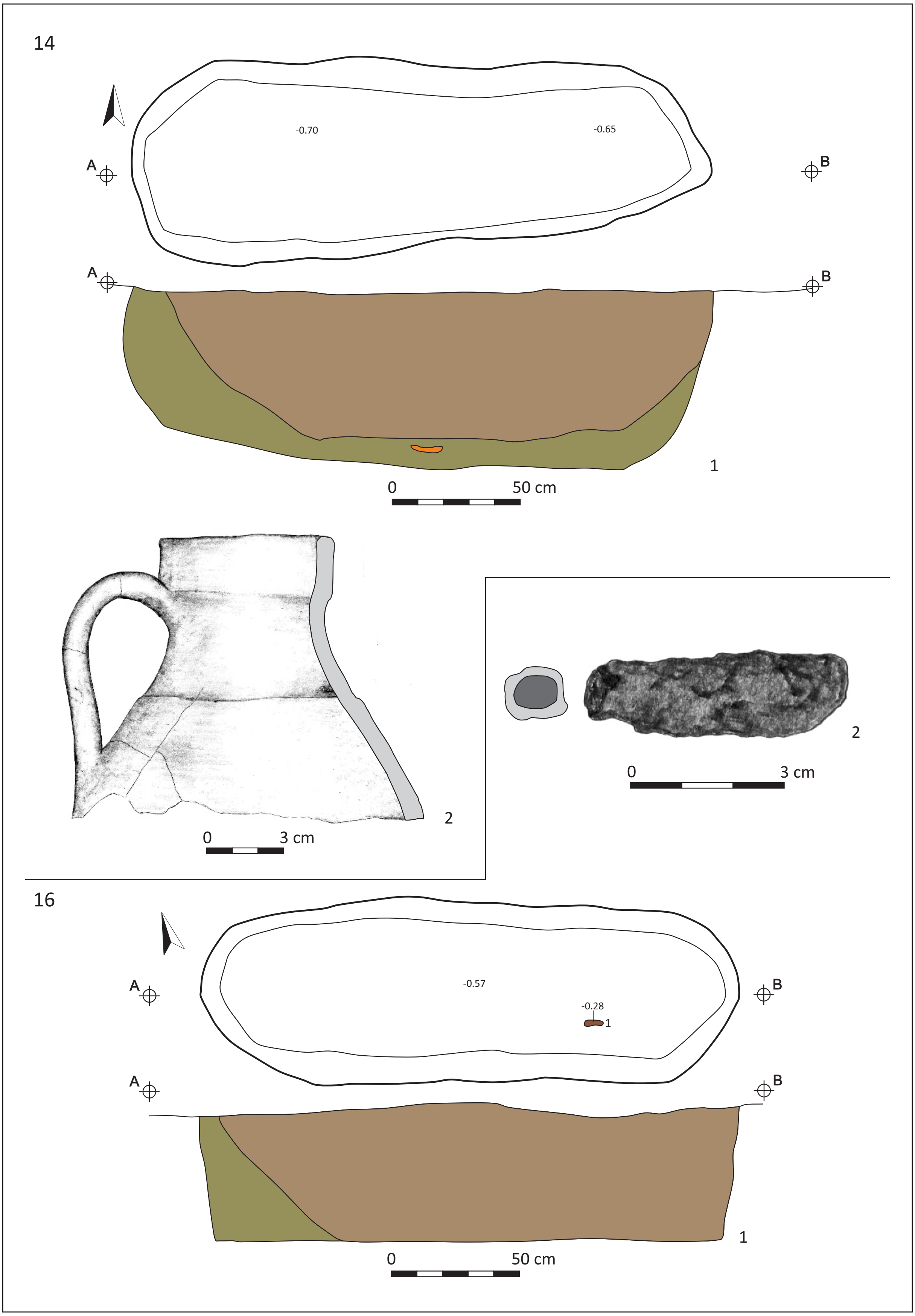

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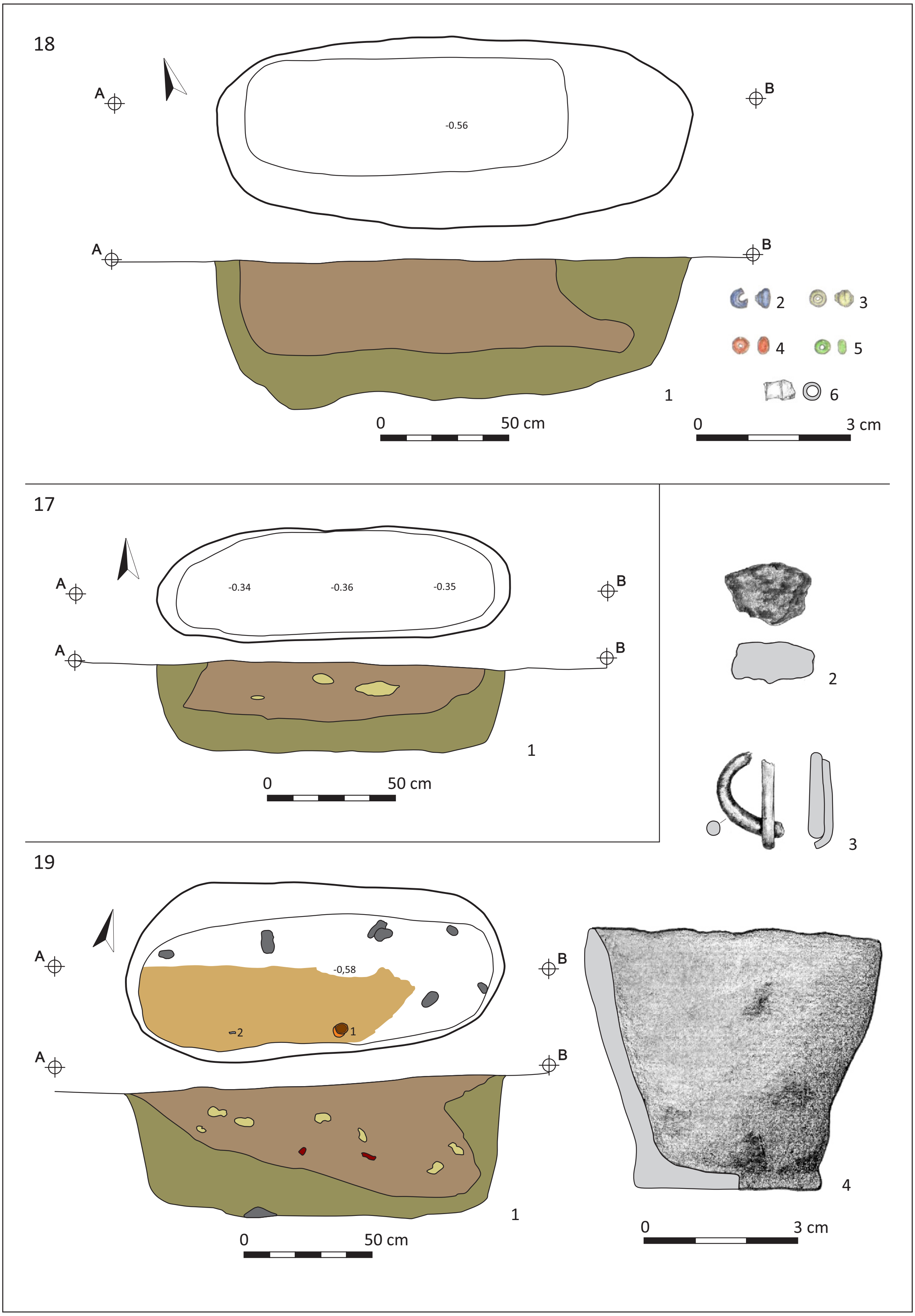

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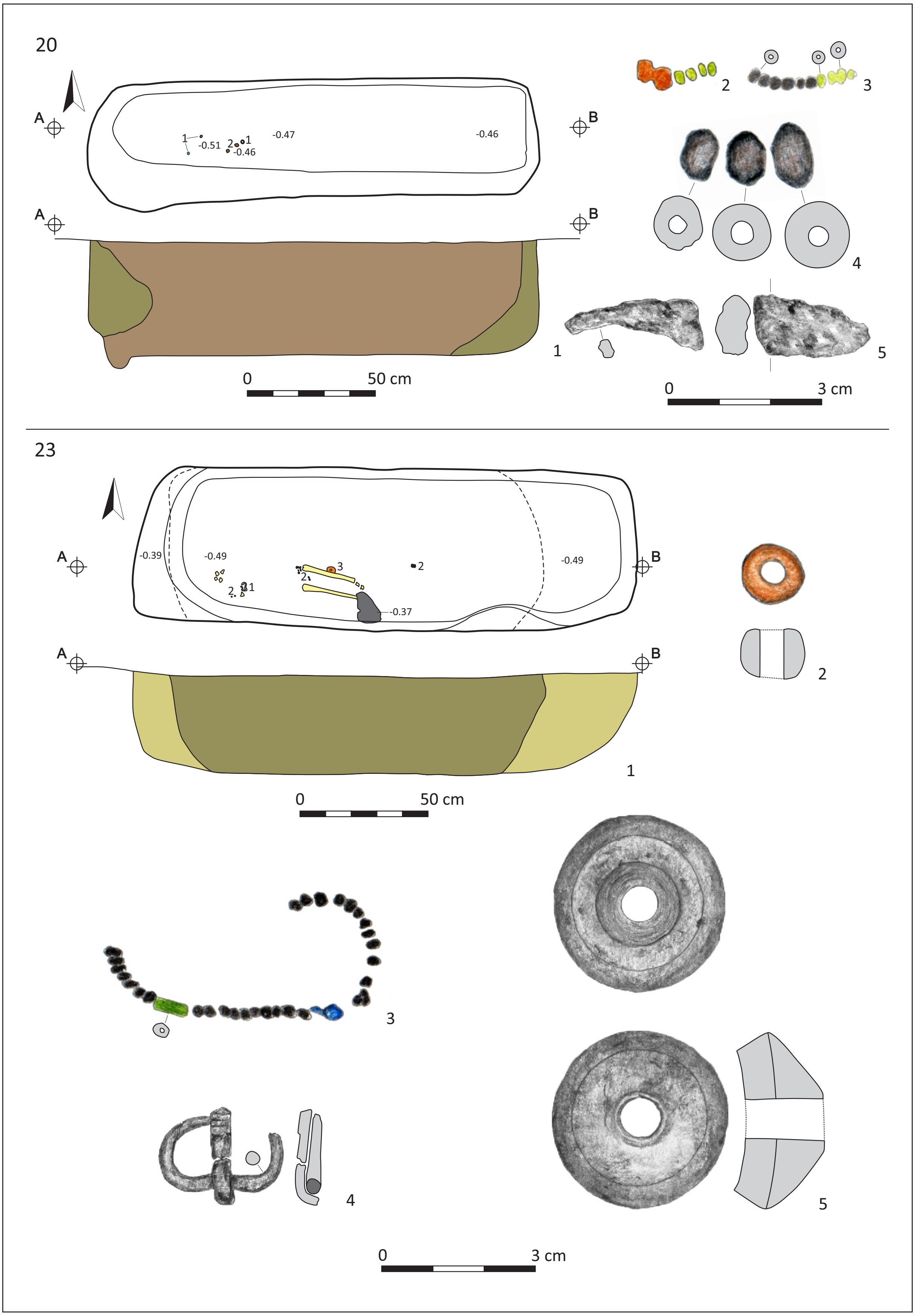

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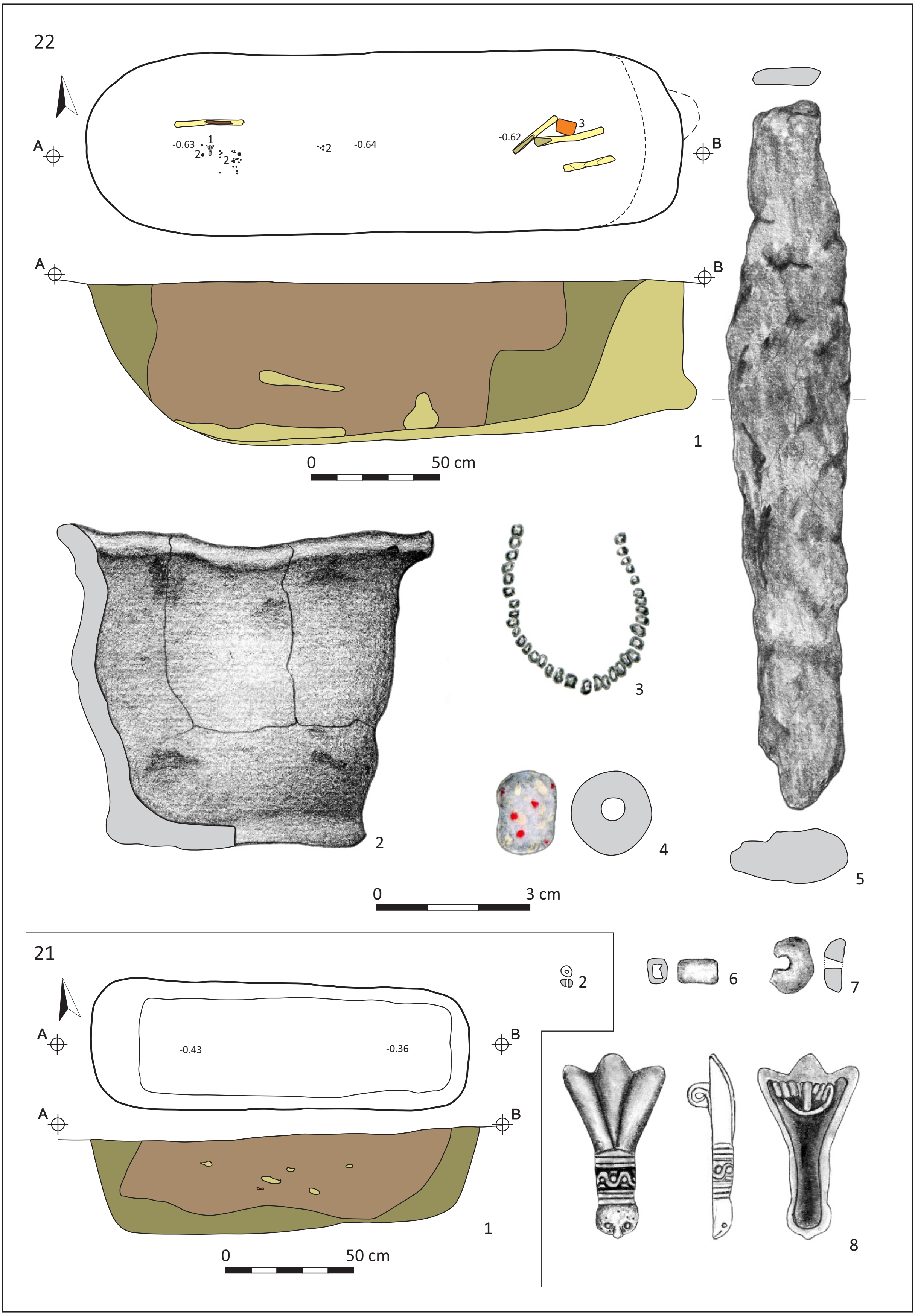

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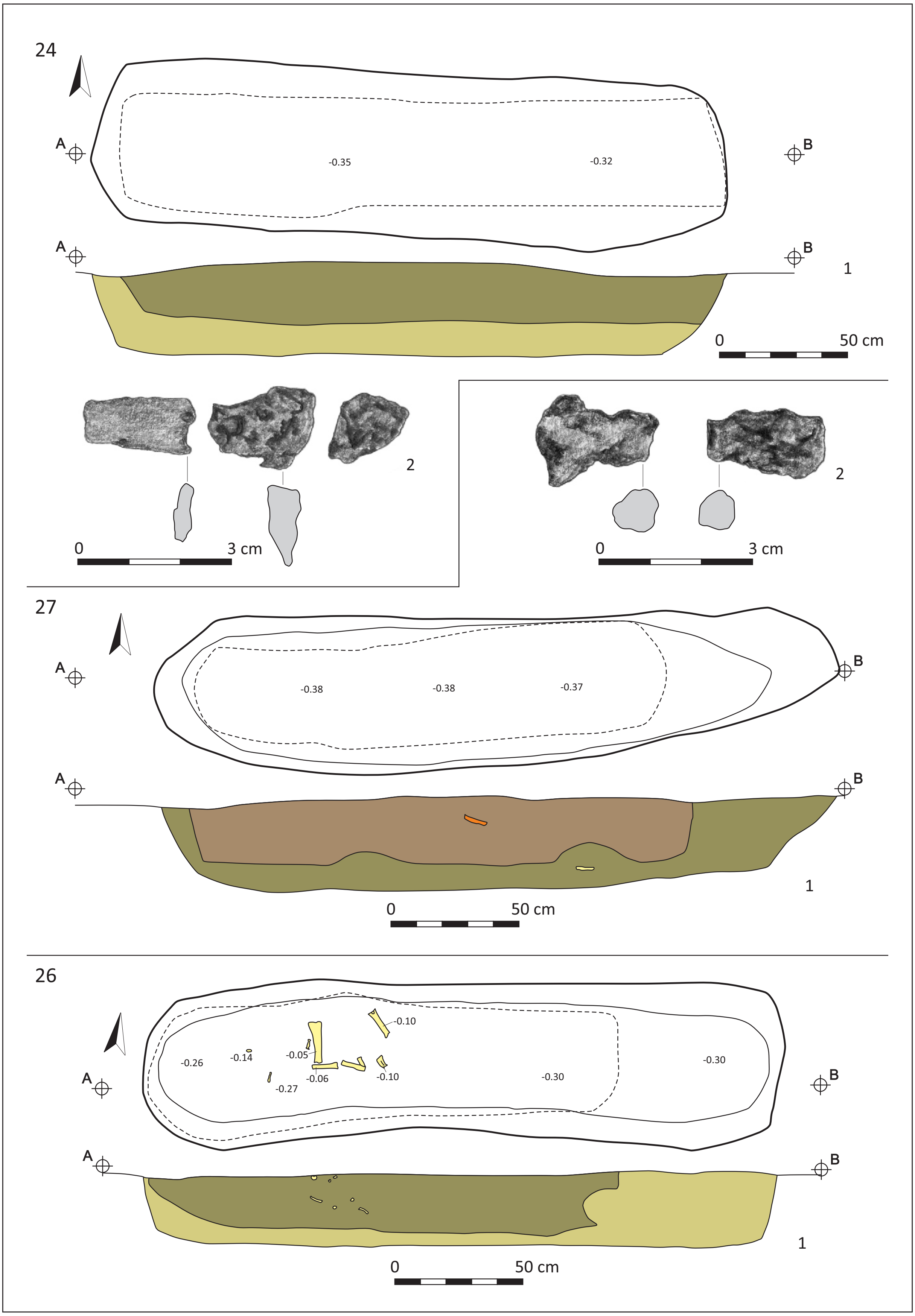

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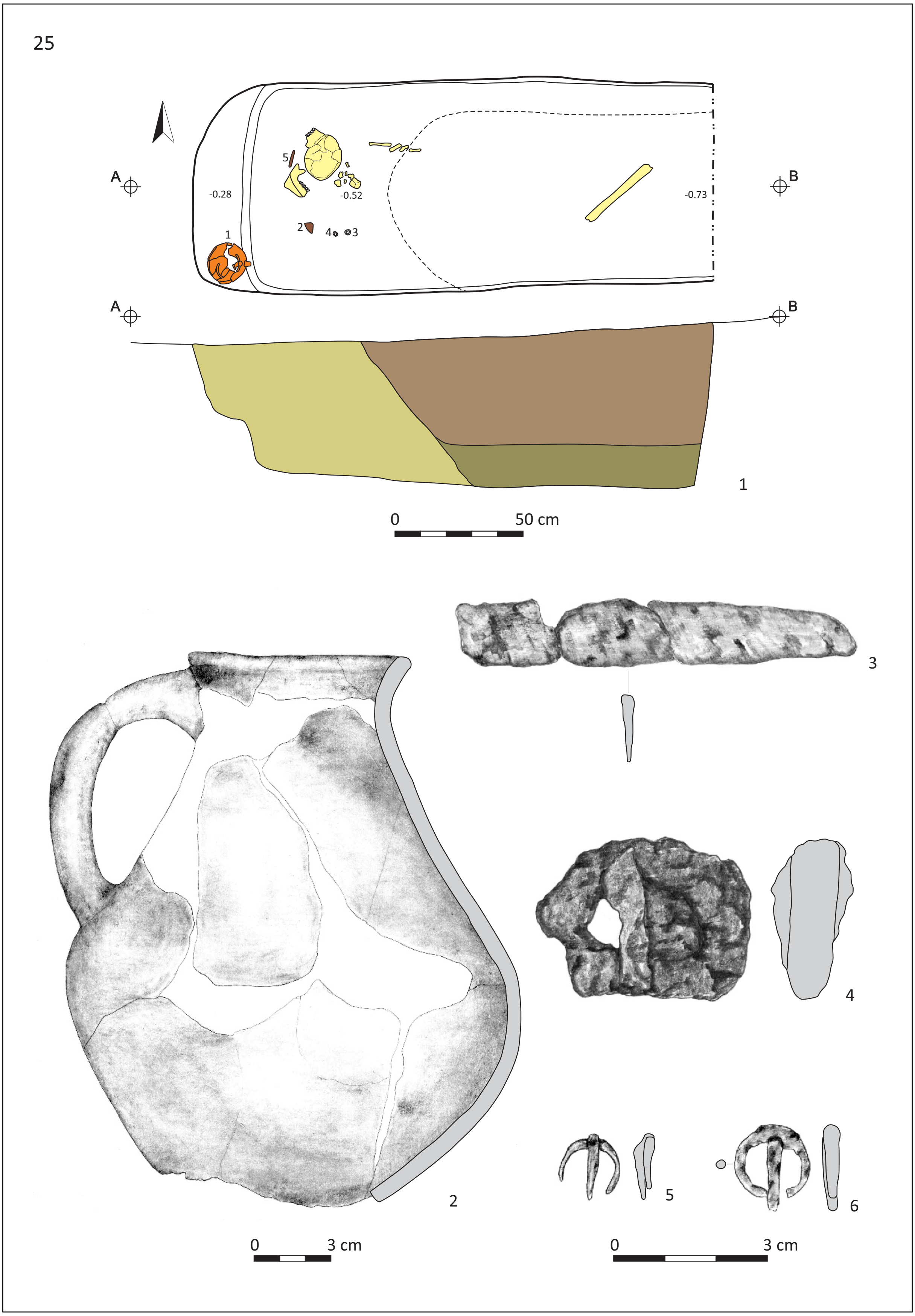

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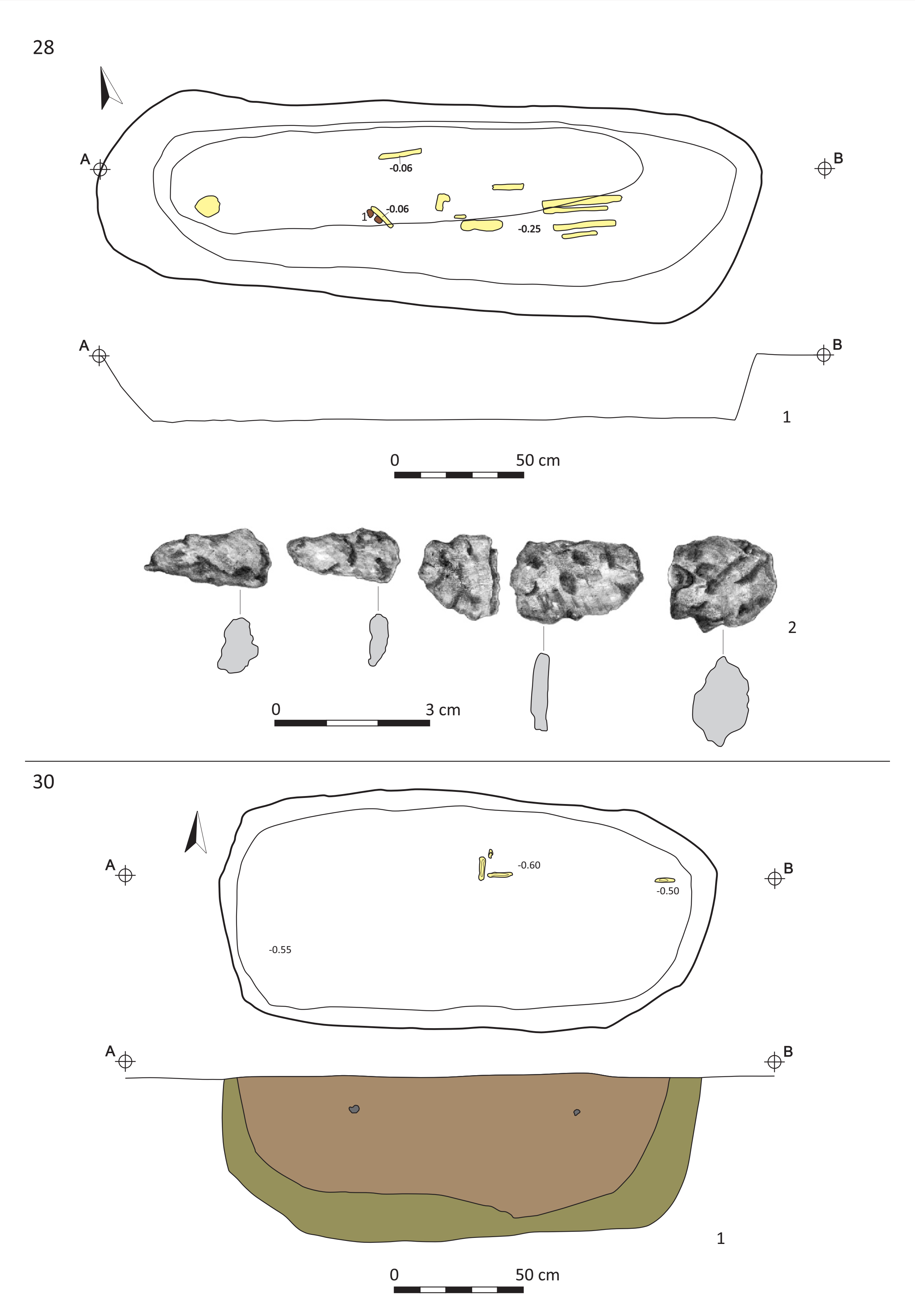

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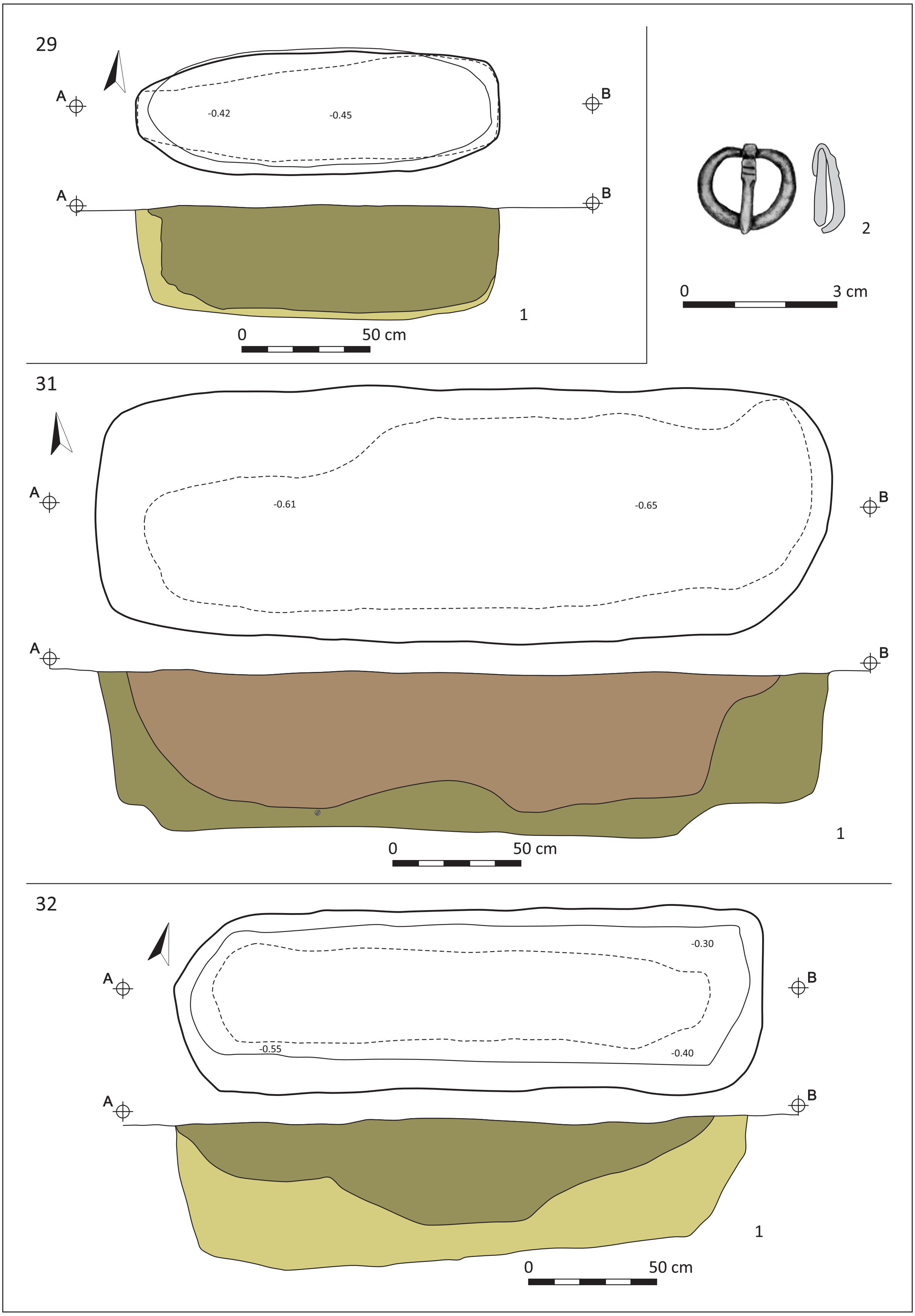

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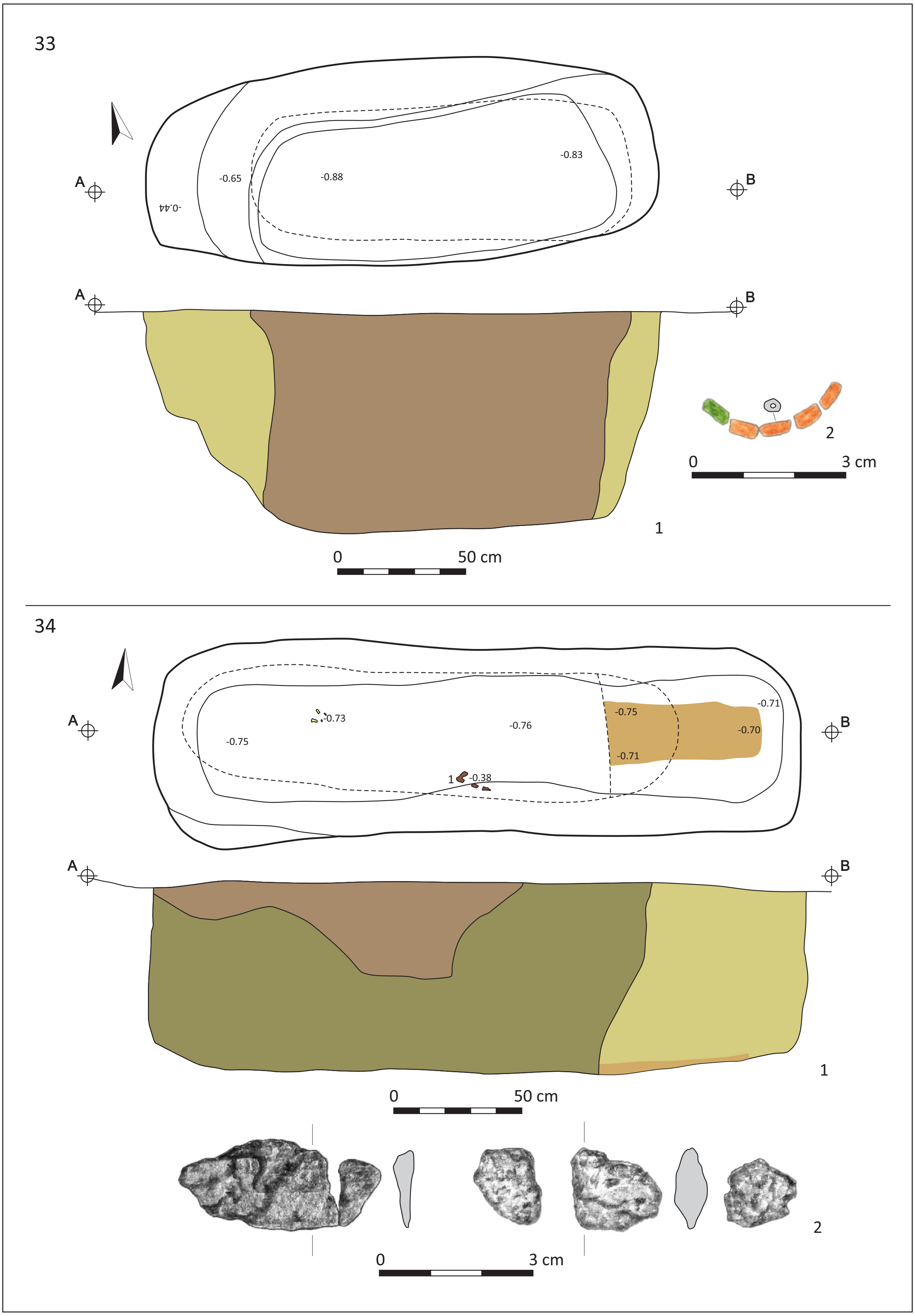

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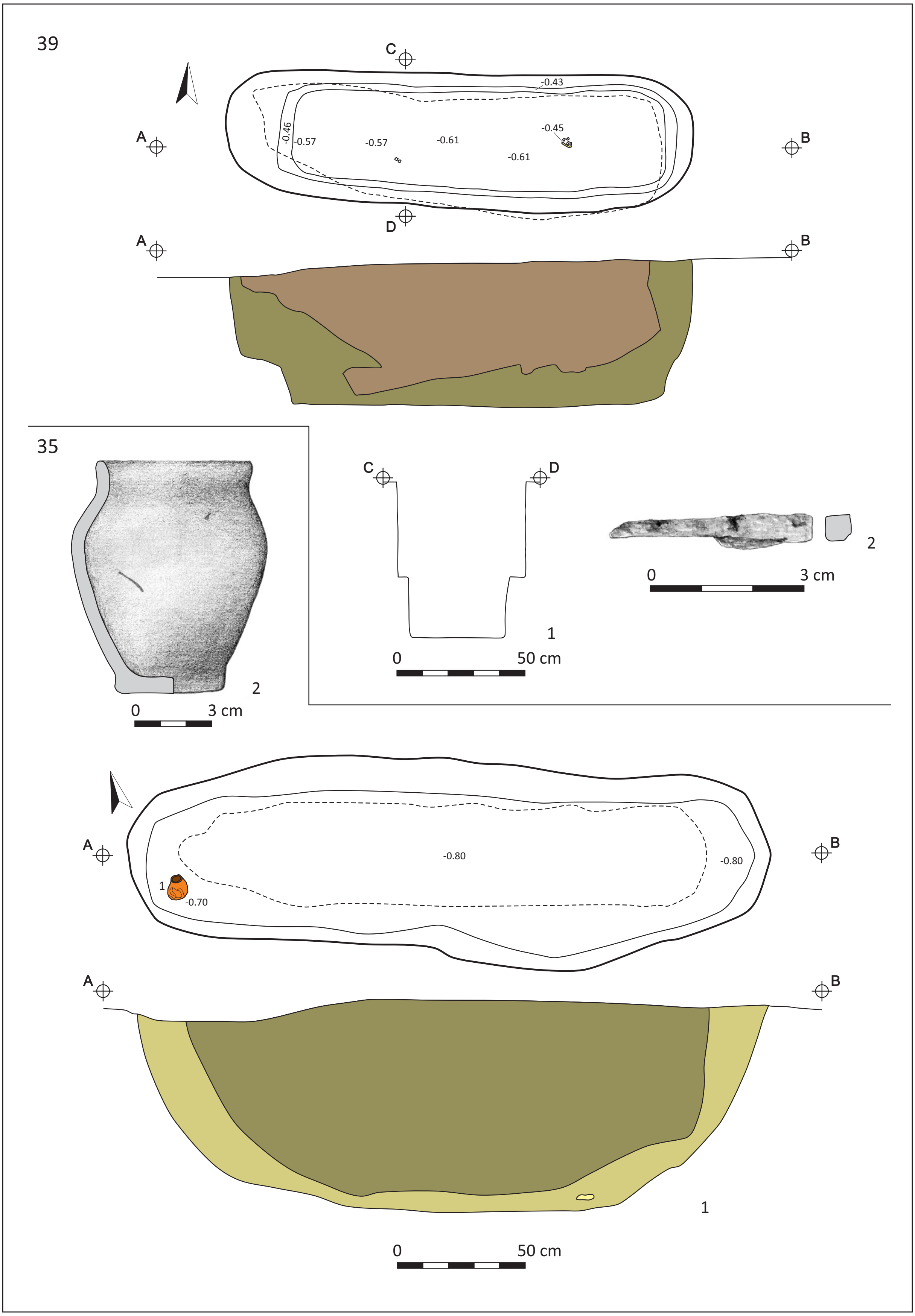

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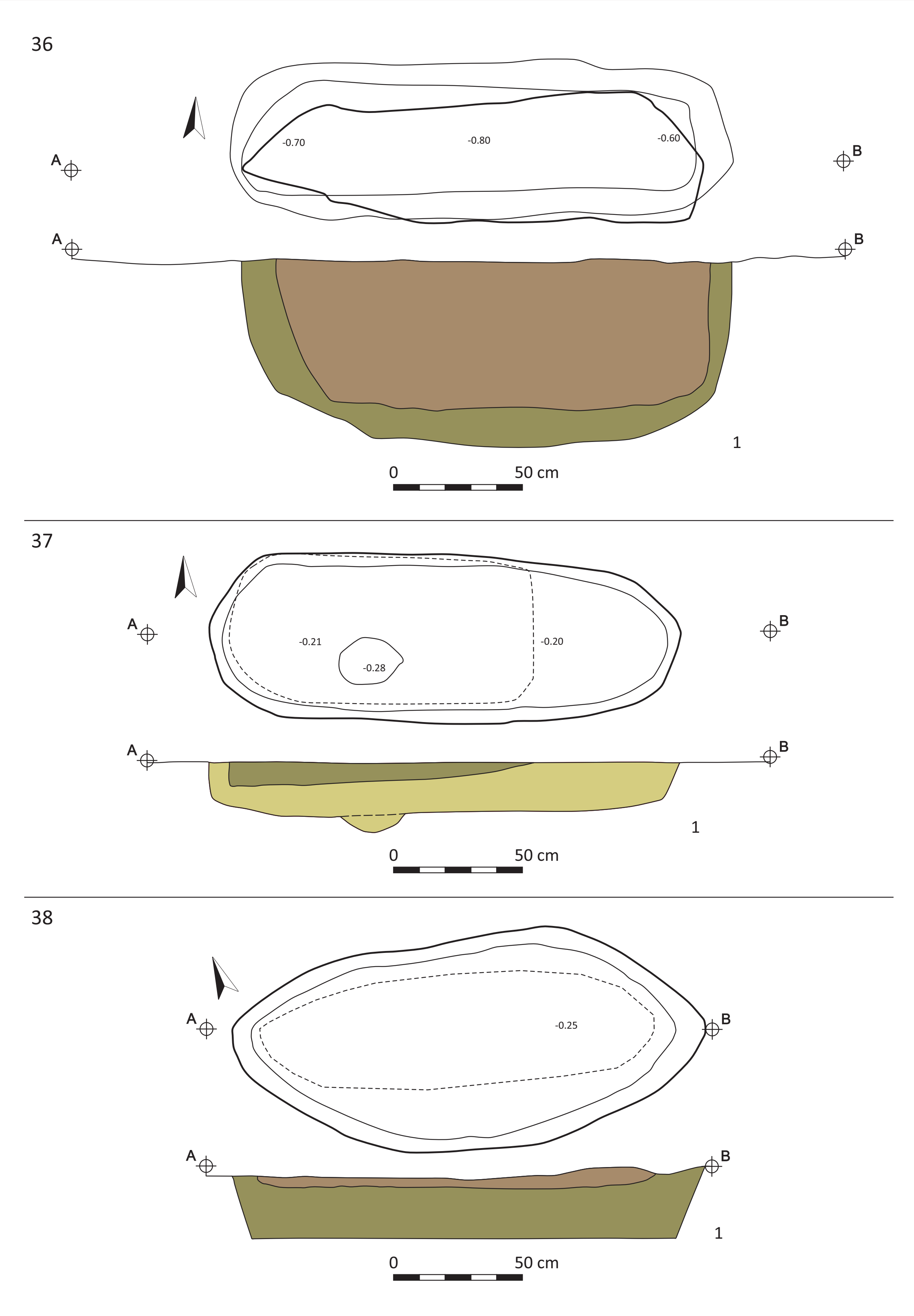

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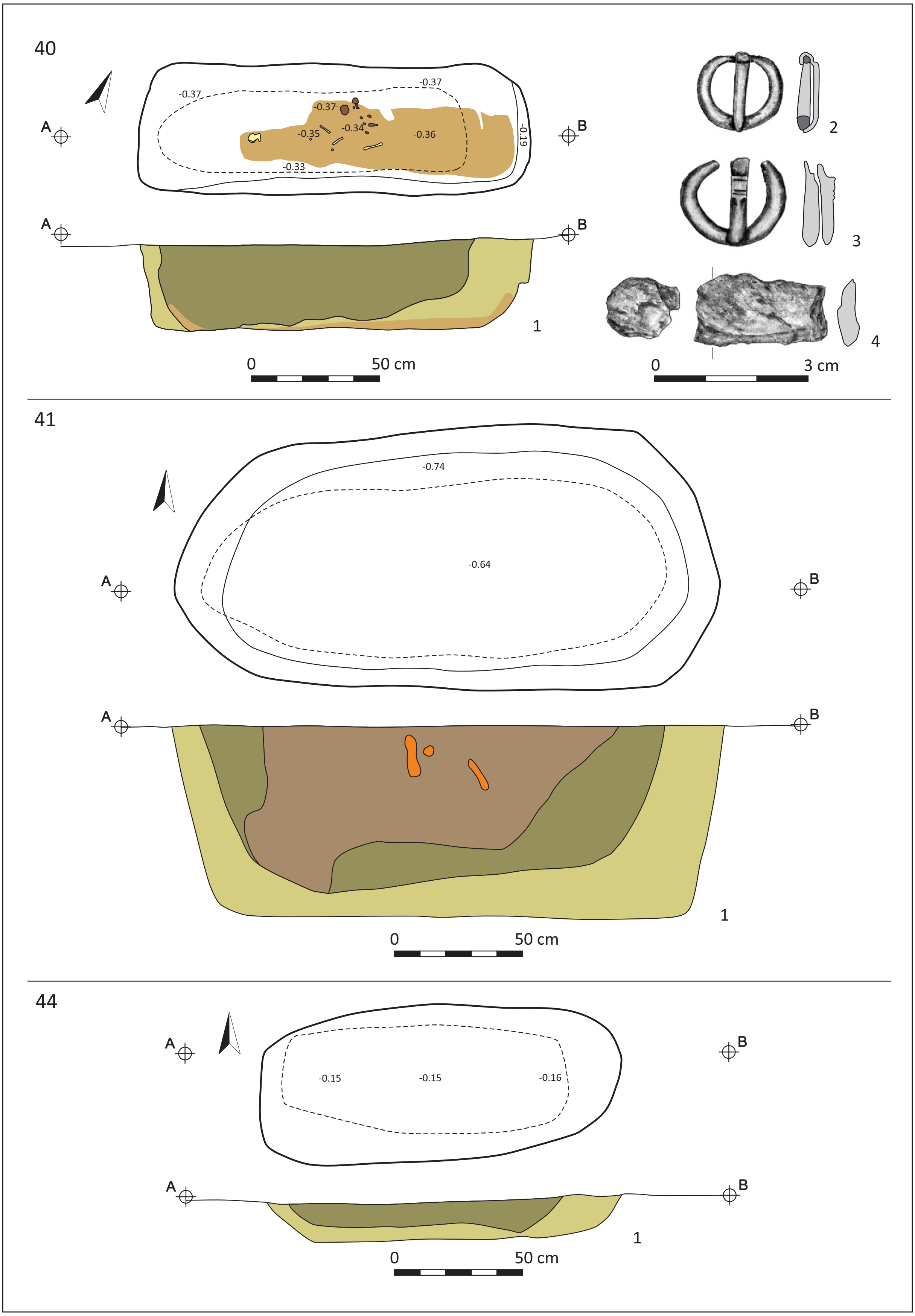

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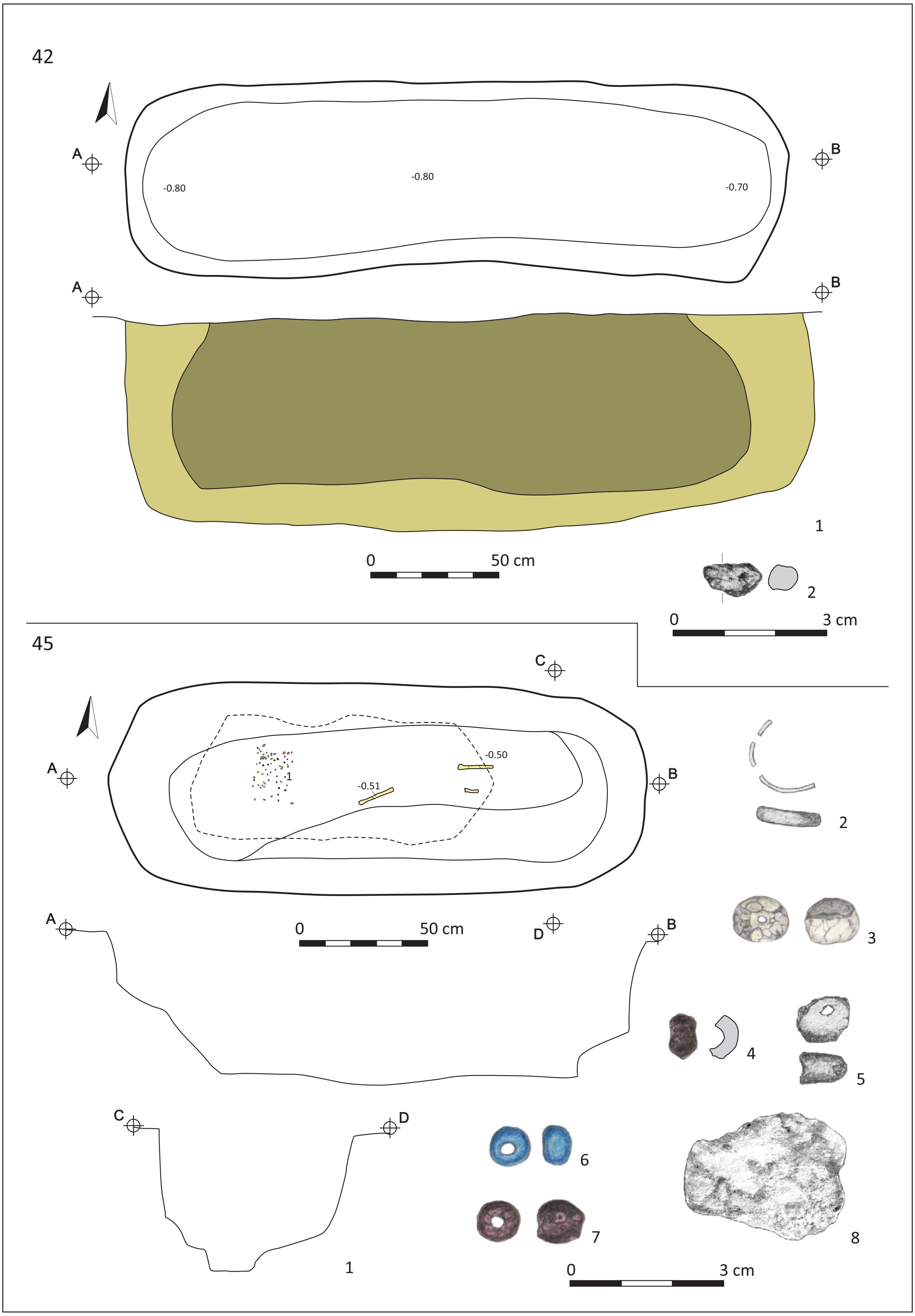

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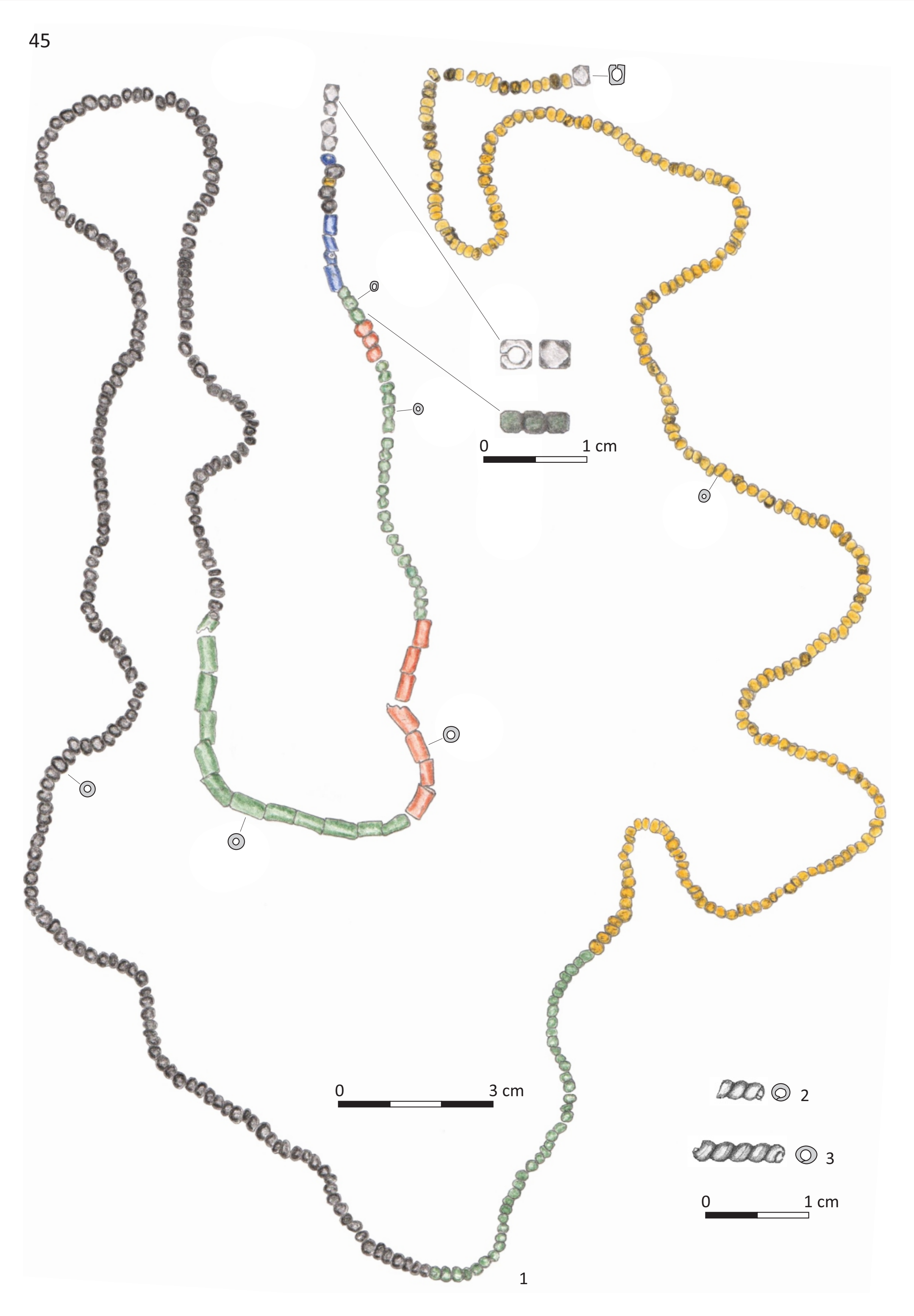
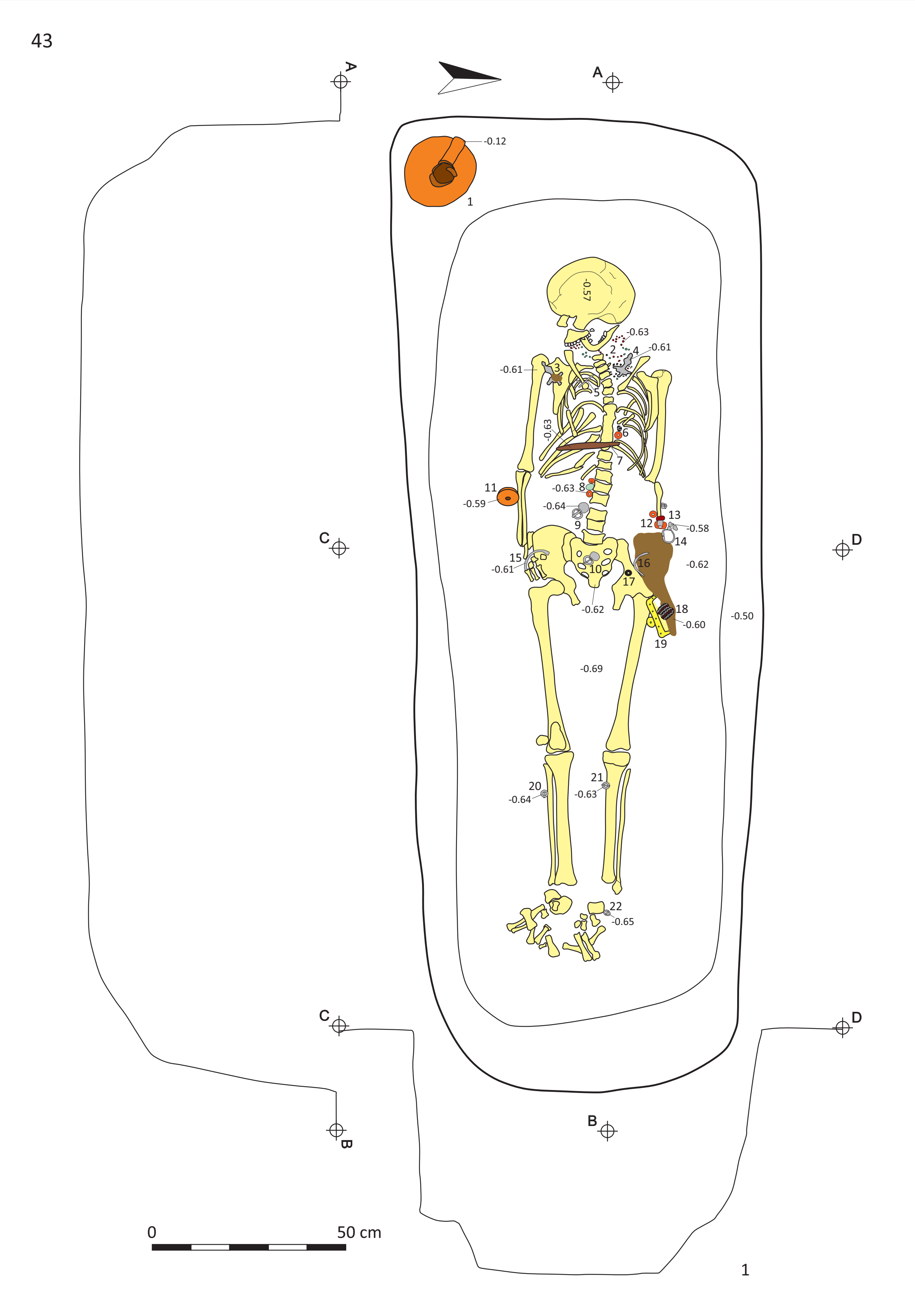


Plate 22. Grave 45.



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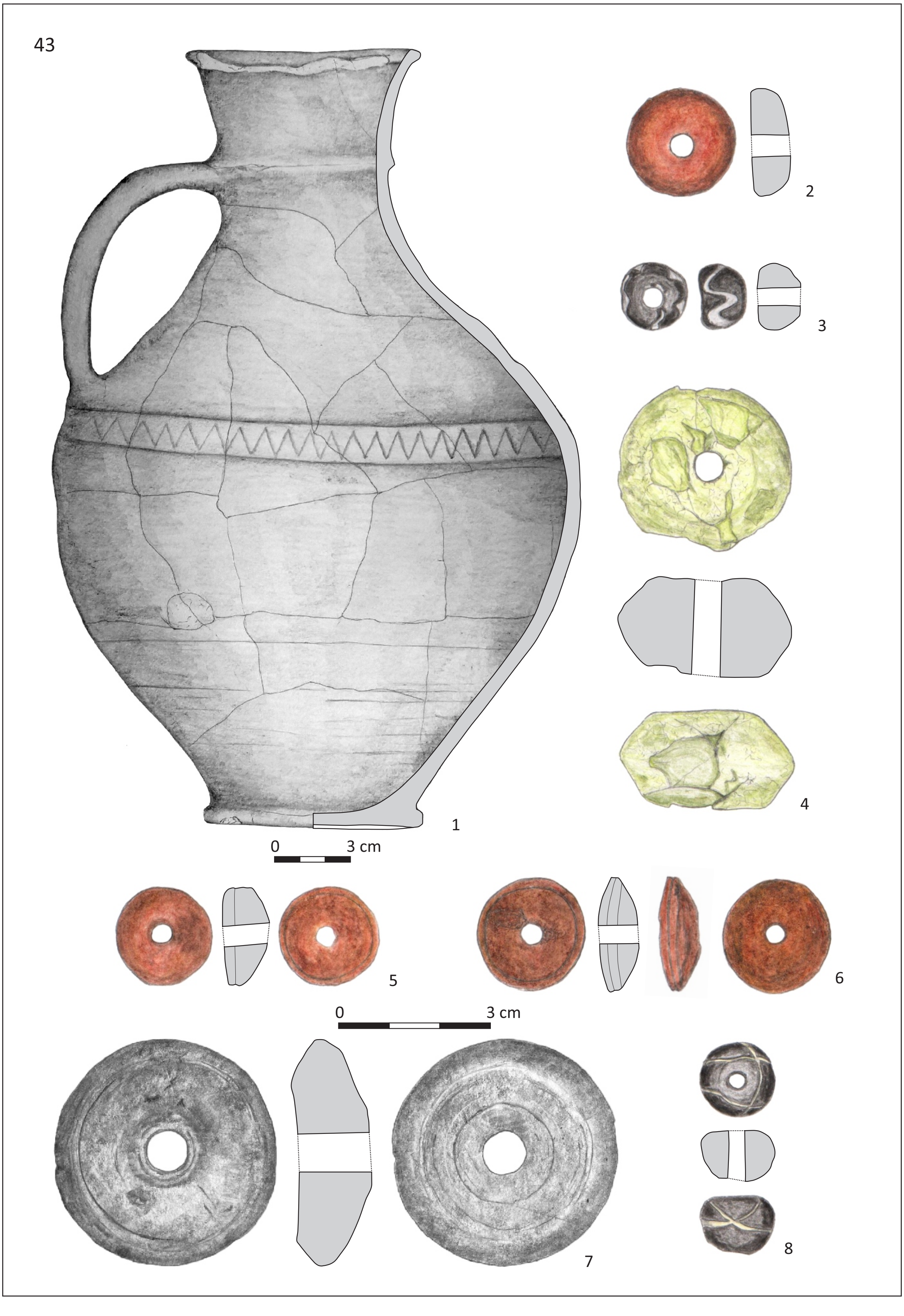

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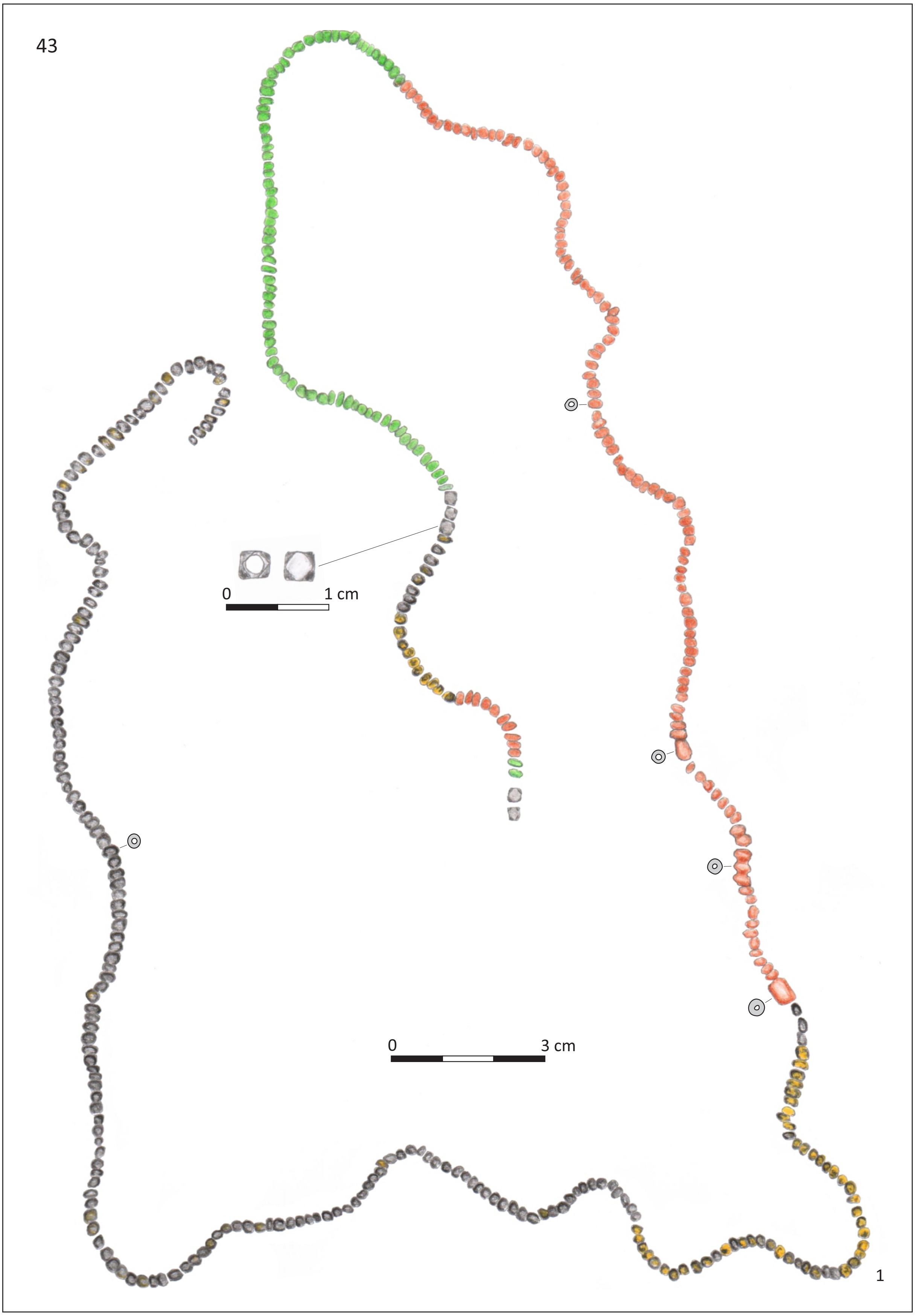

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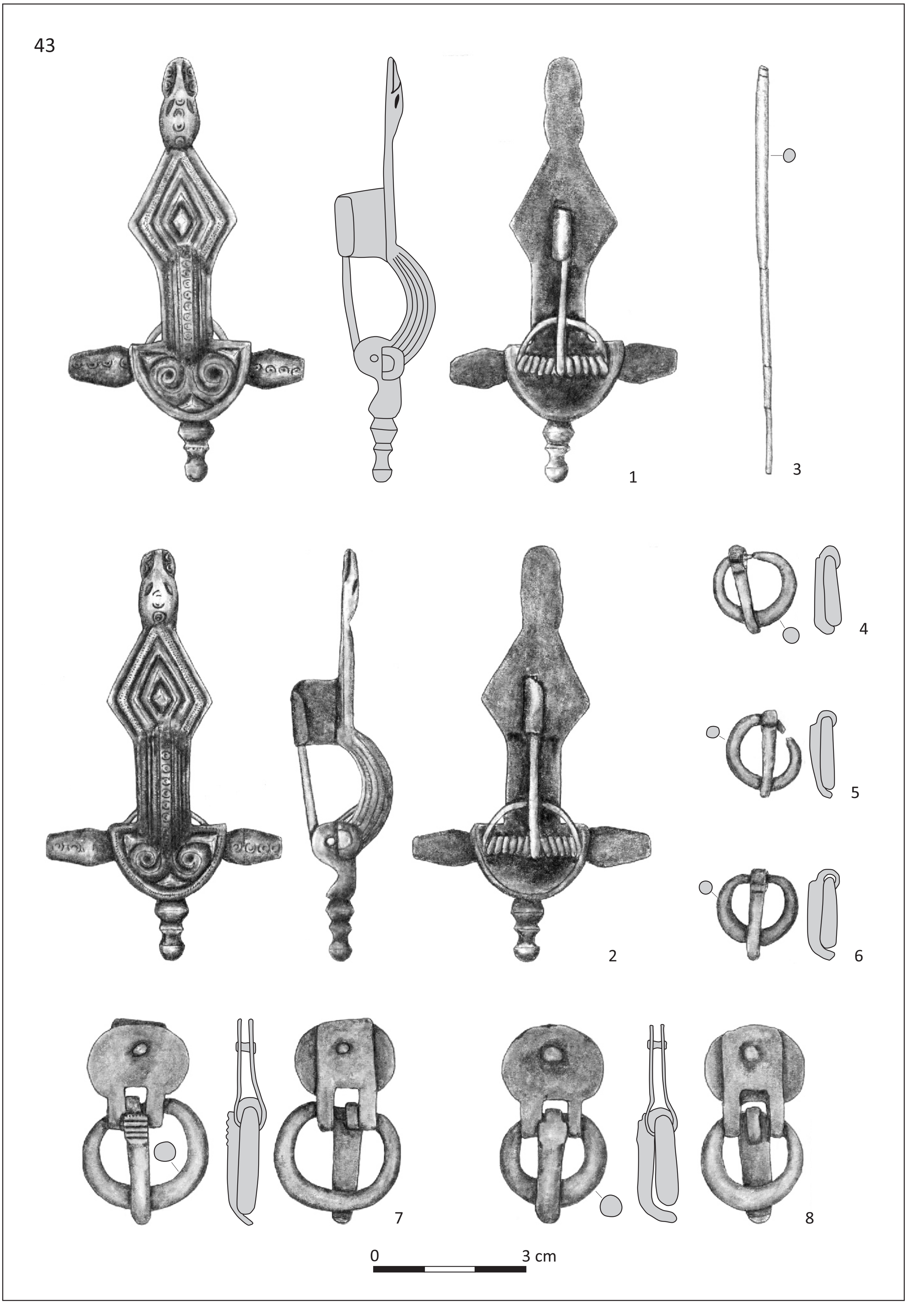

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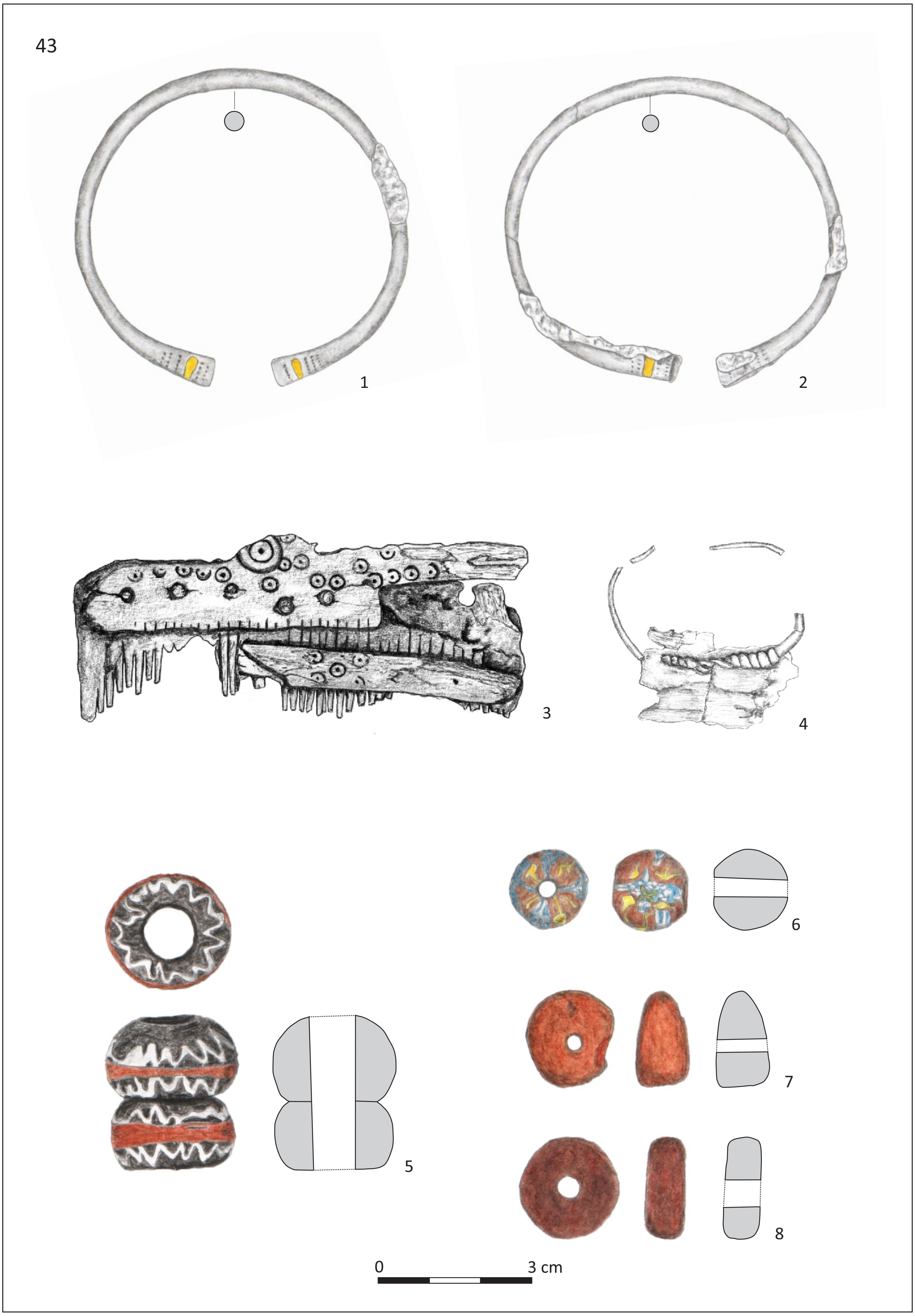

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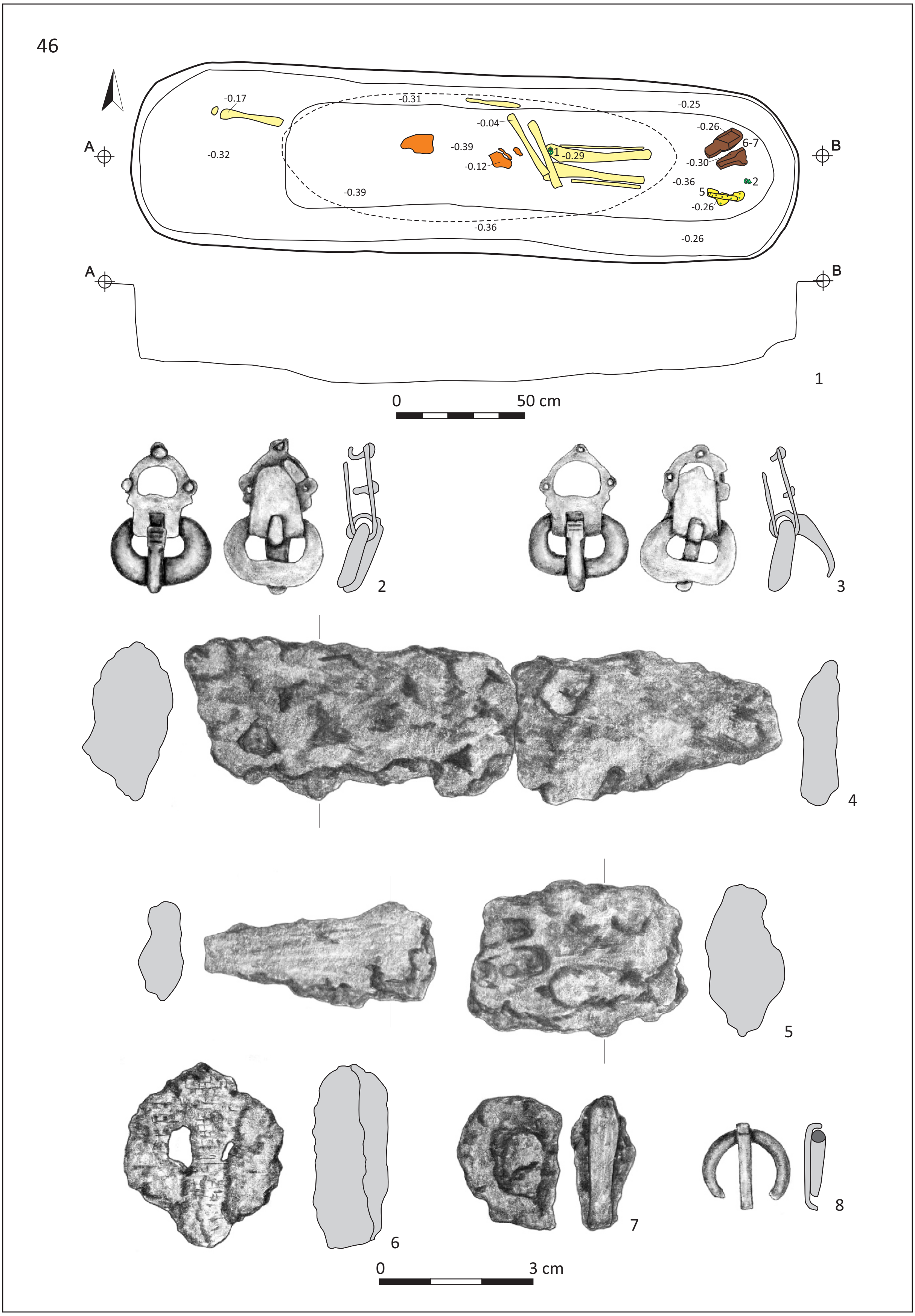

Plate 28. Grave 46.

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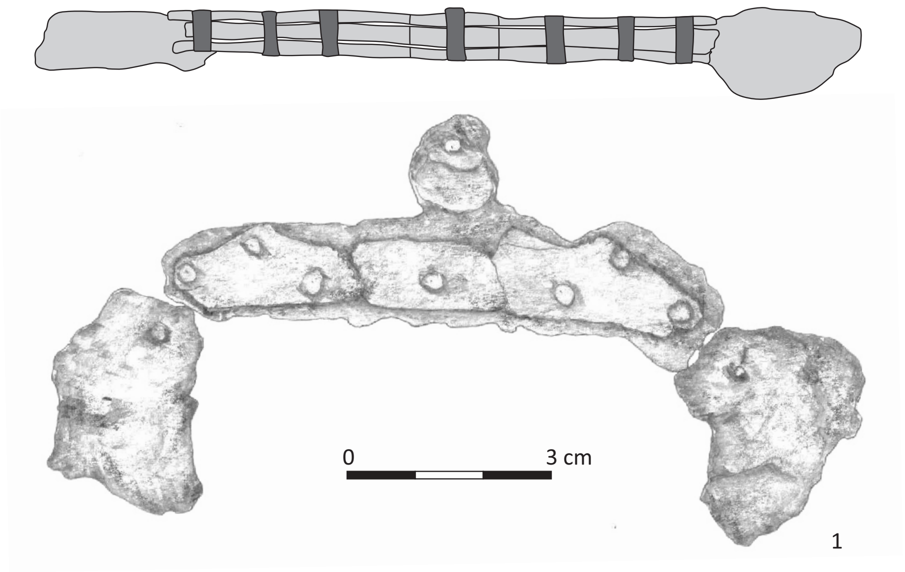

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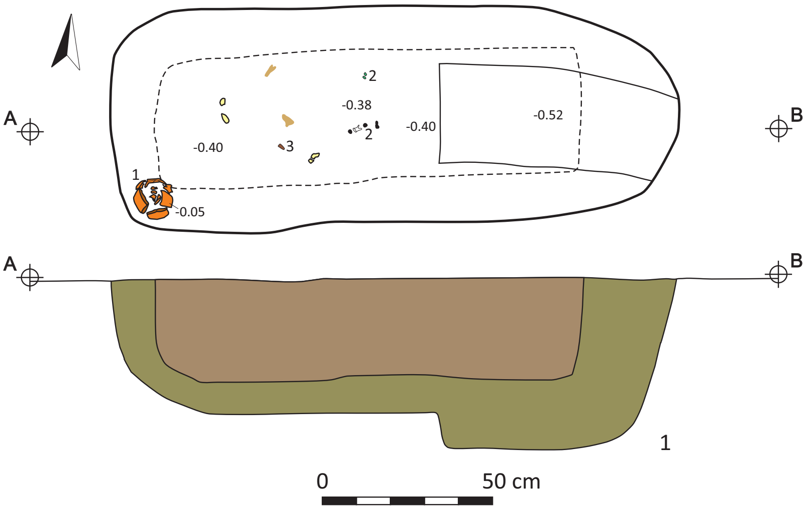
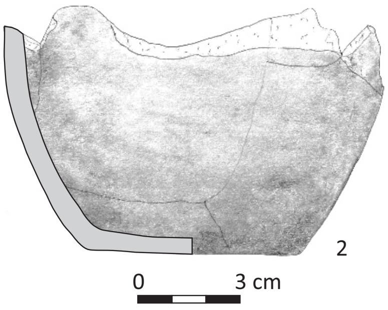




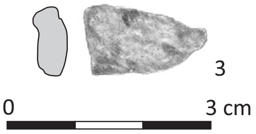
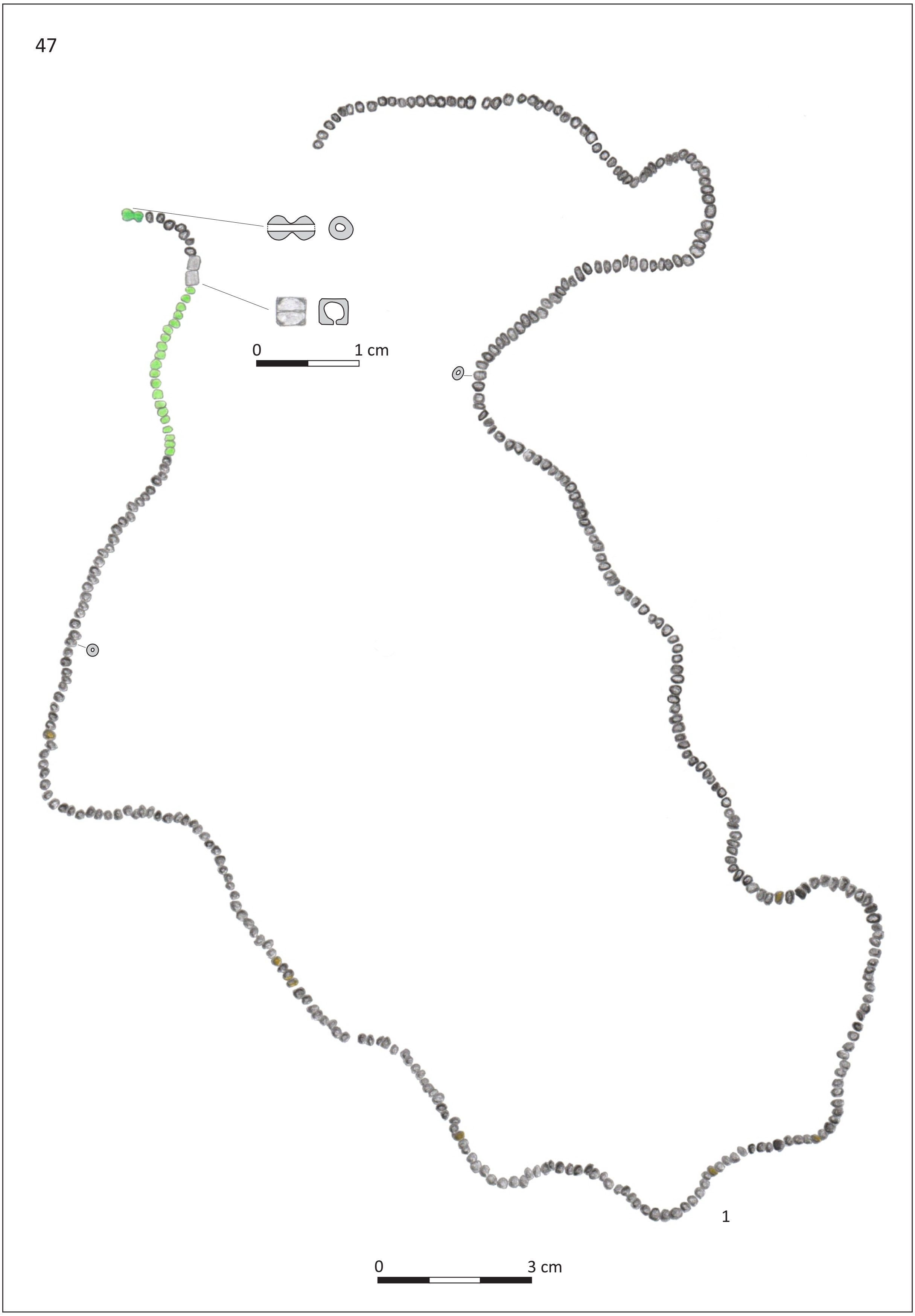


Plate 29. Graves 46 and 47.



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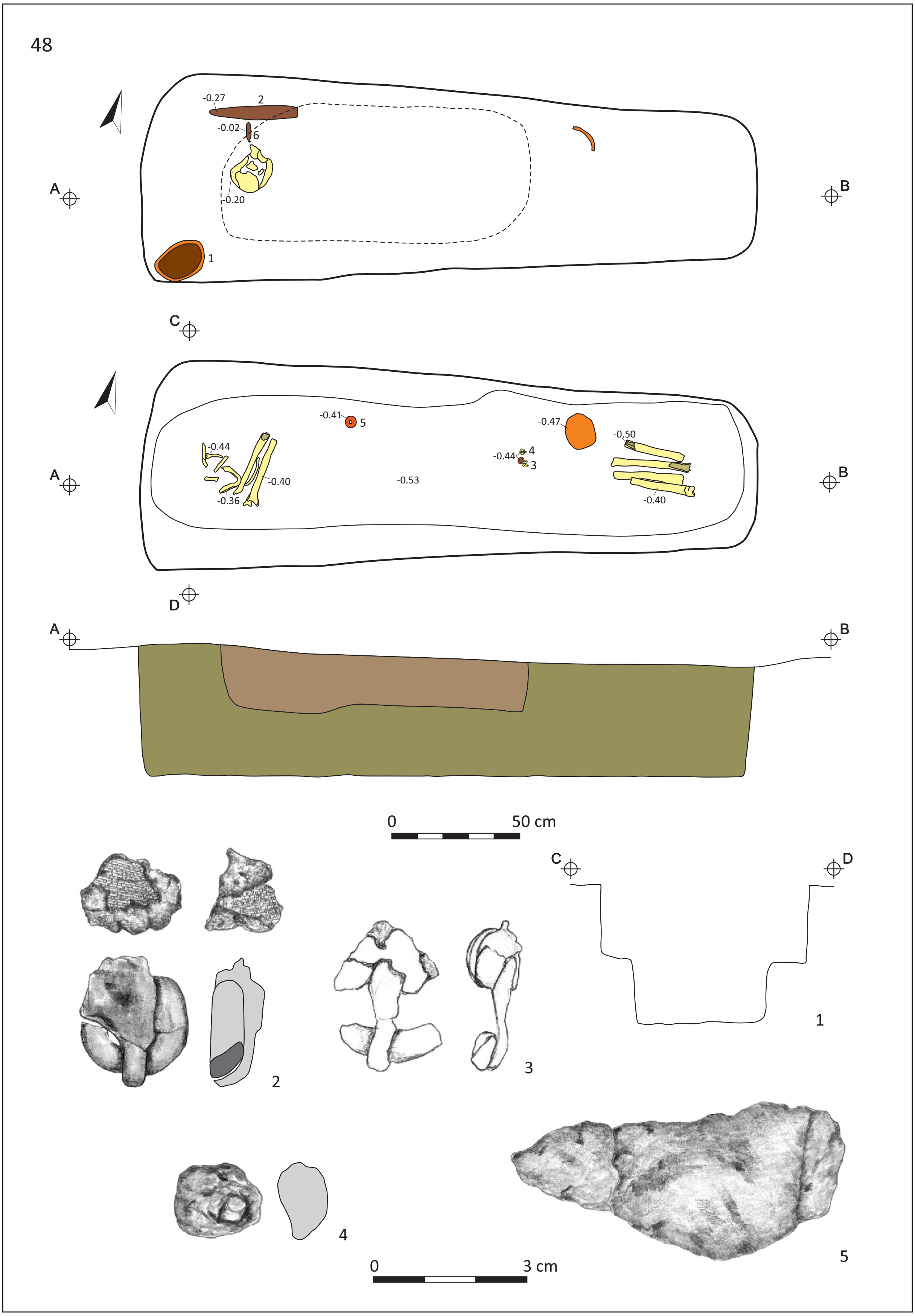

Plate 31. Grave 48.

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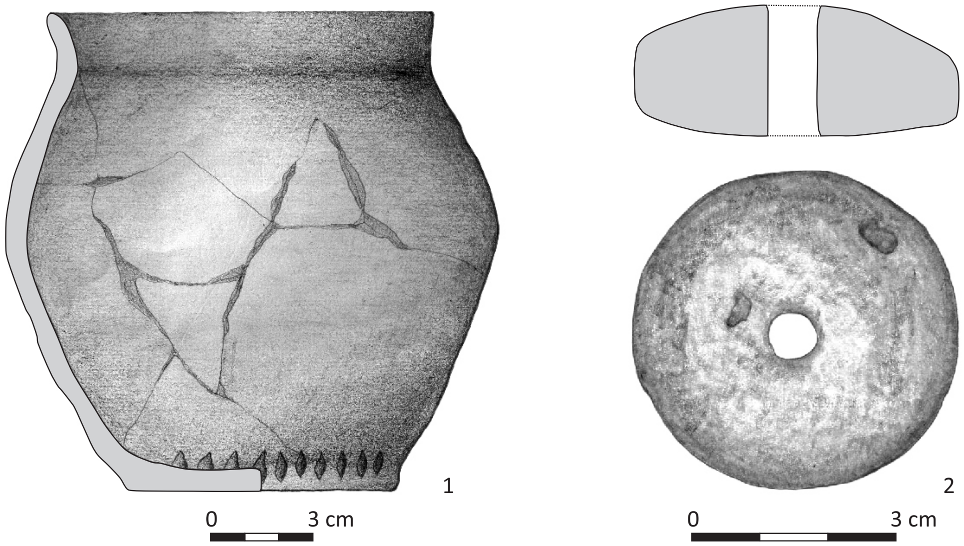

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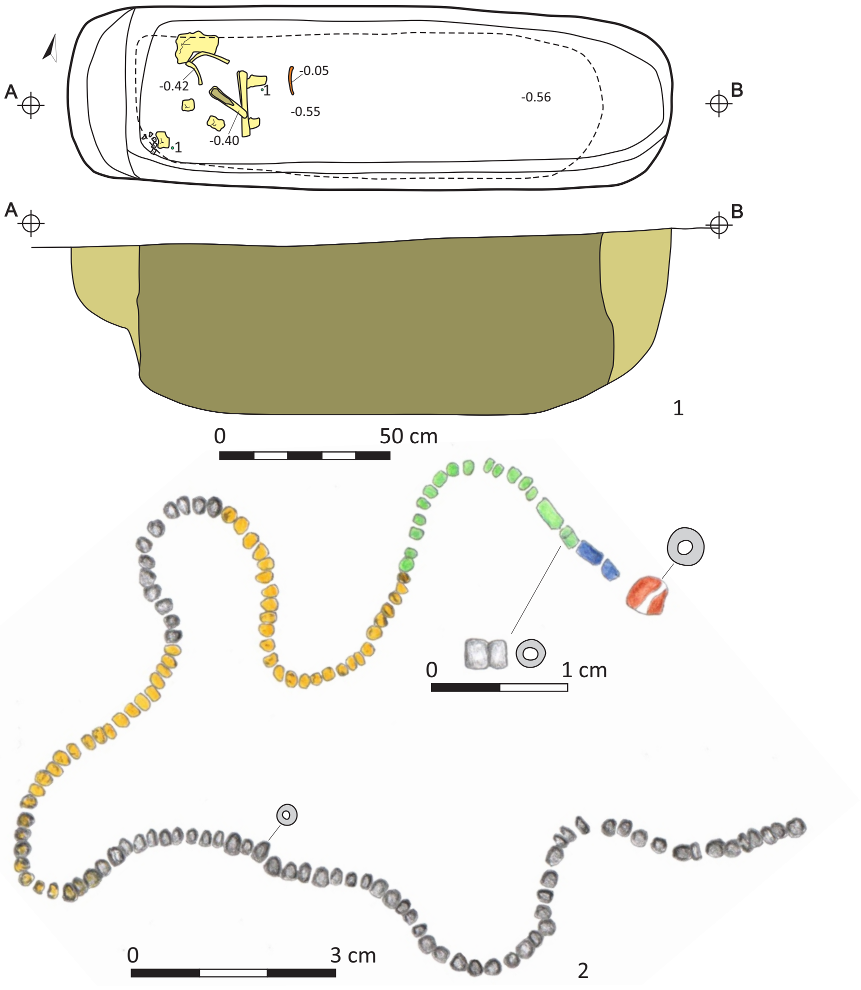

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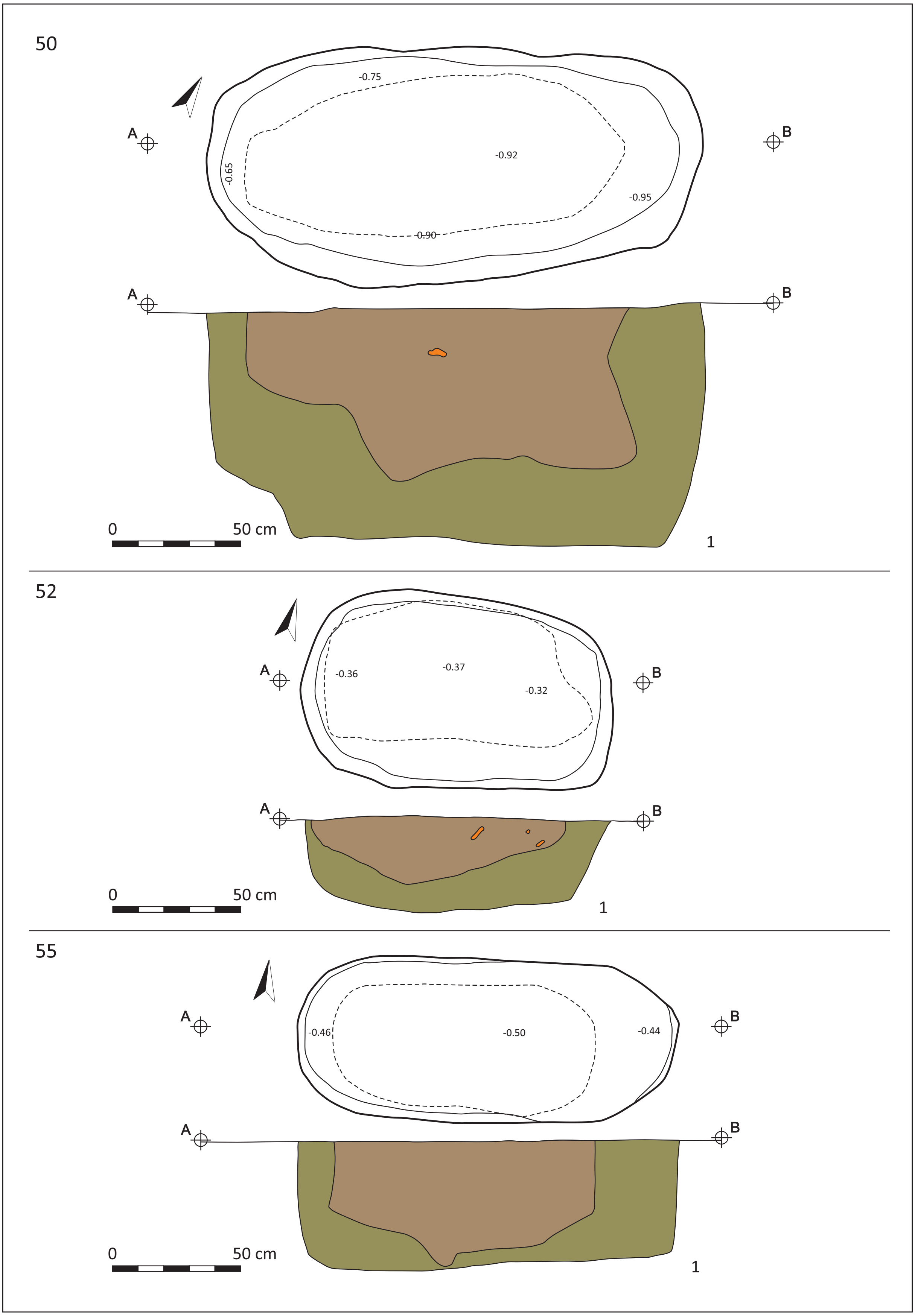
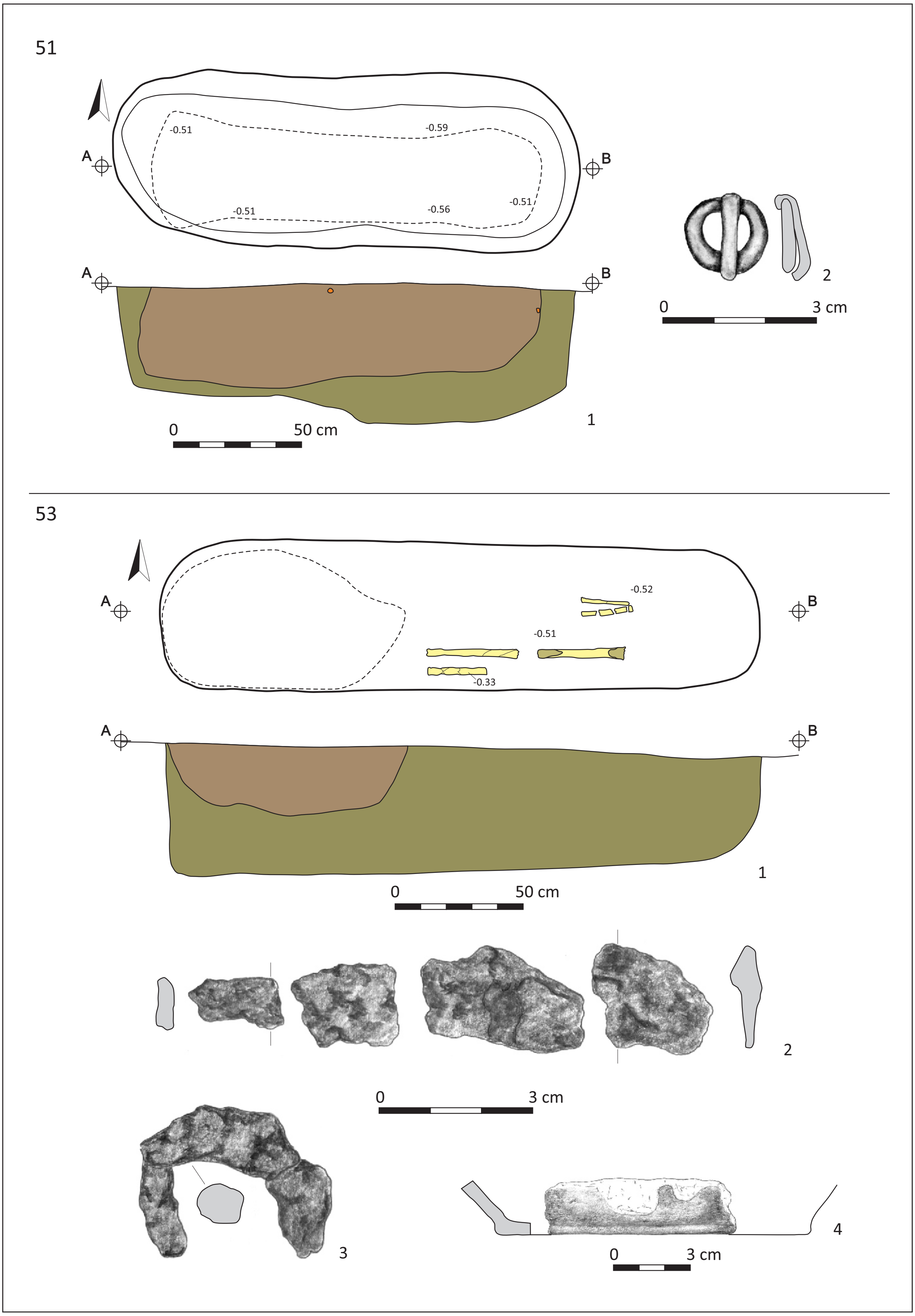


Plate 33. Graves 50, 52 and 55.



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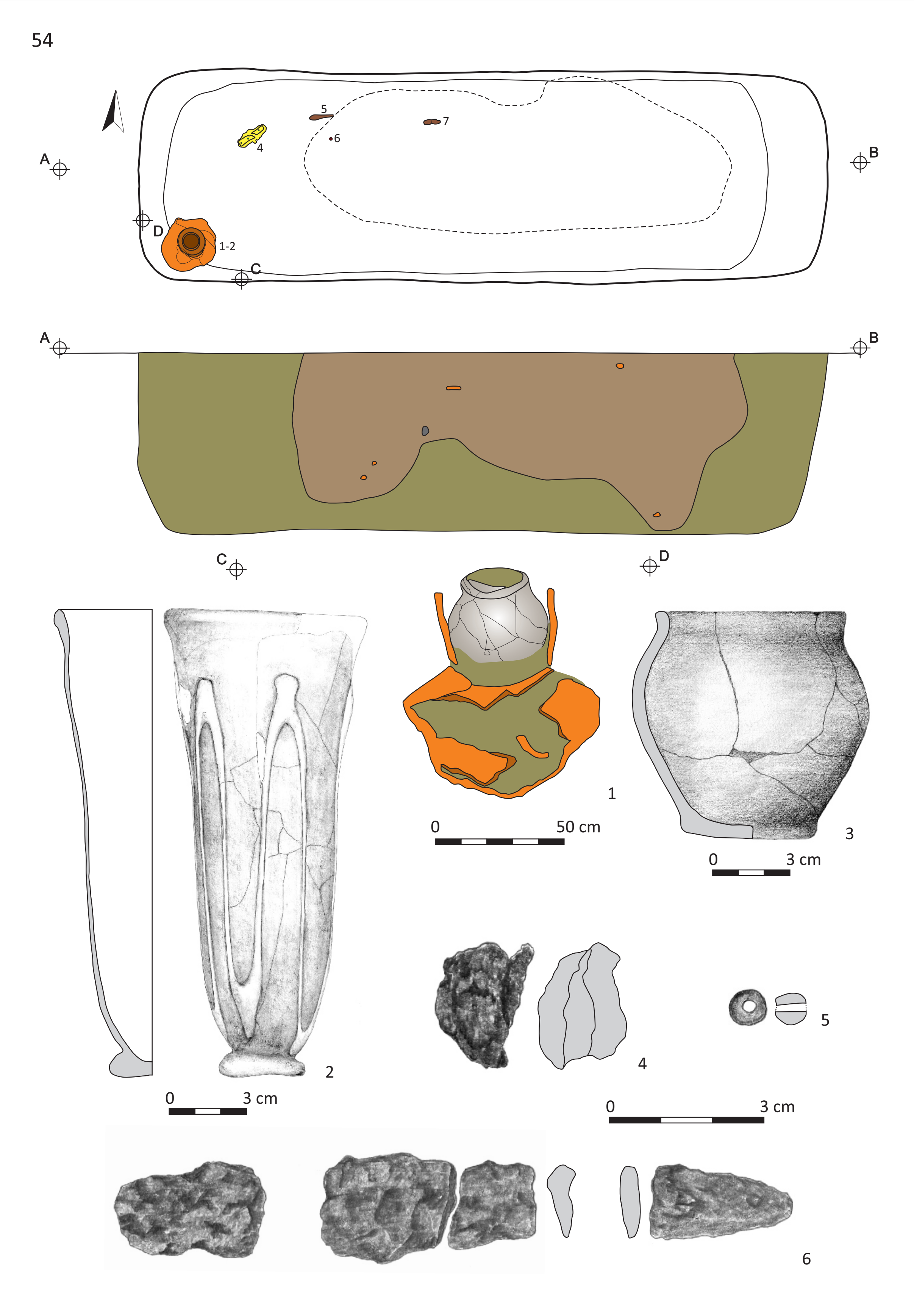

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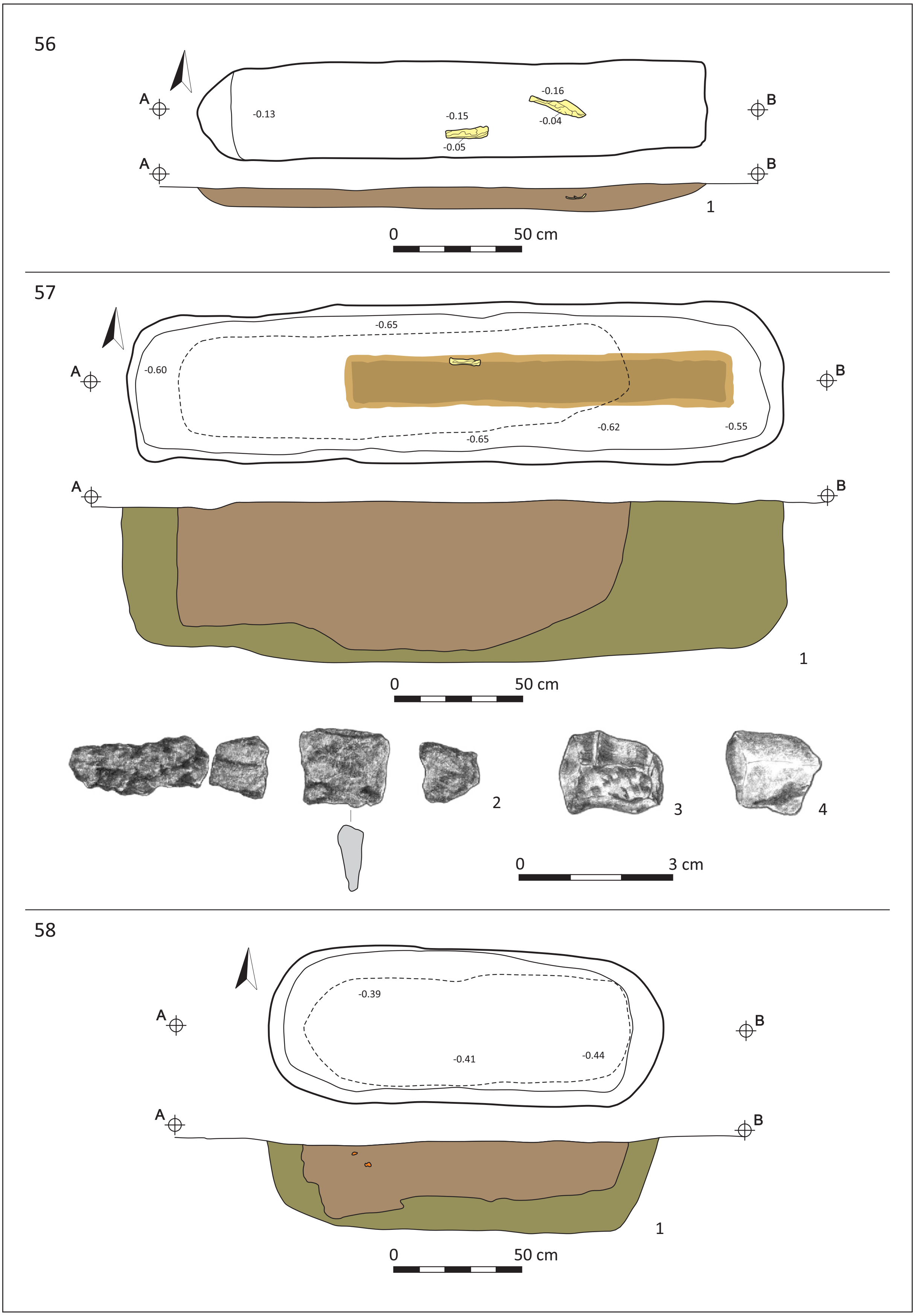
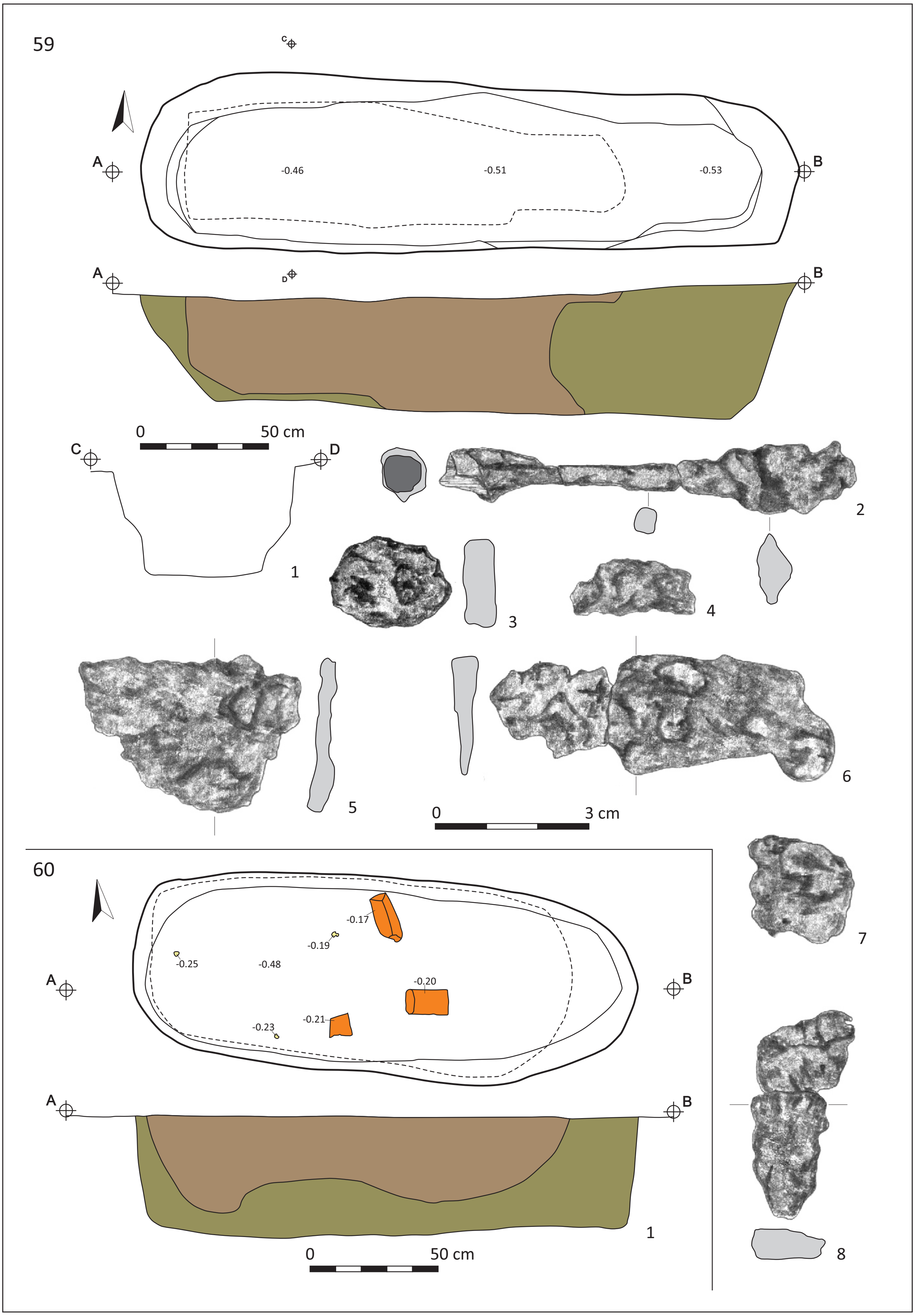


Plate 36. Graves 56, 57 and 58.



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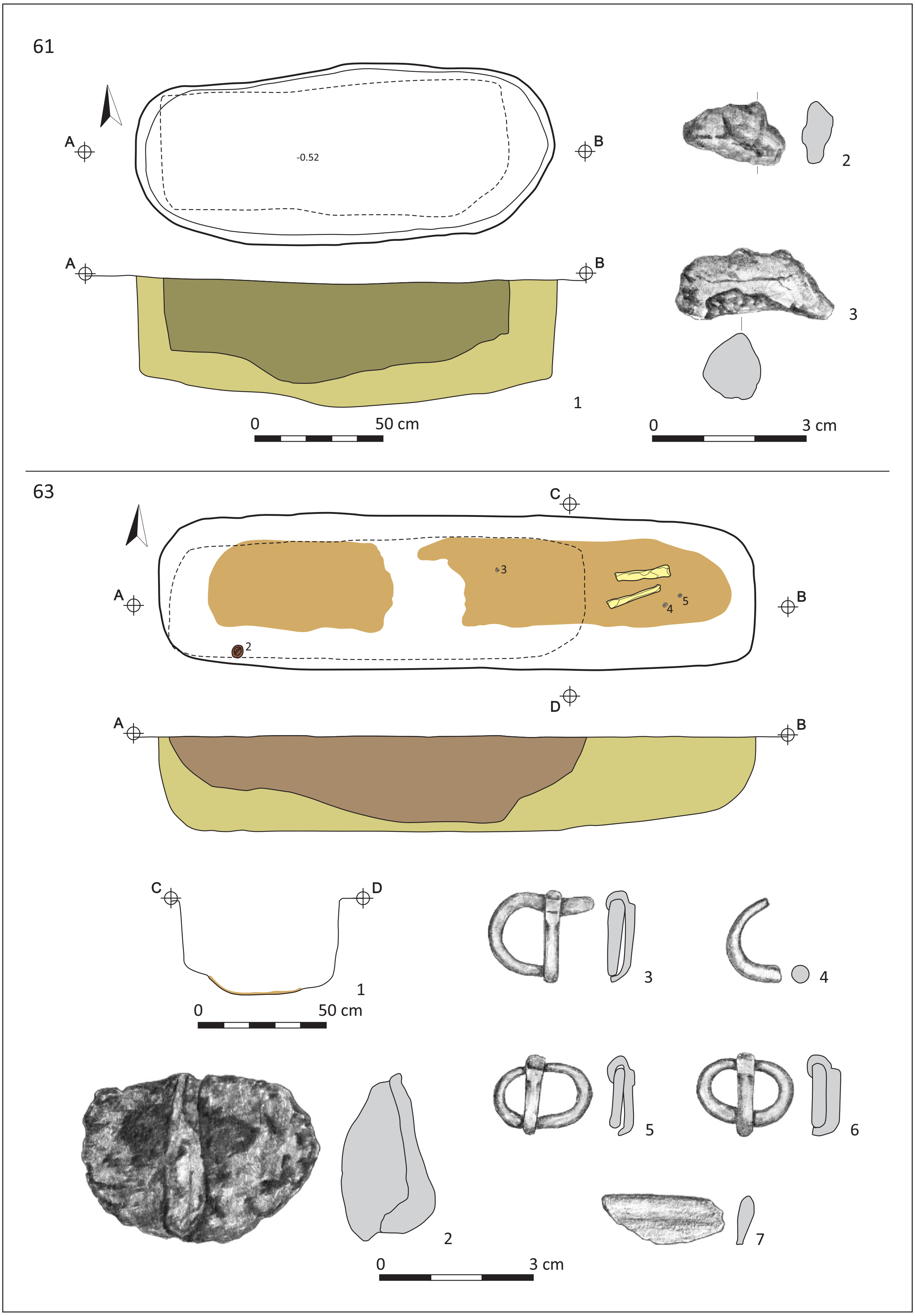

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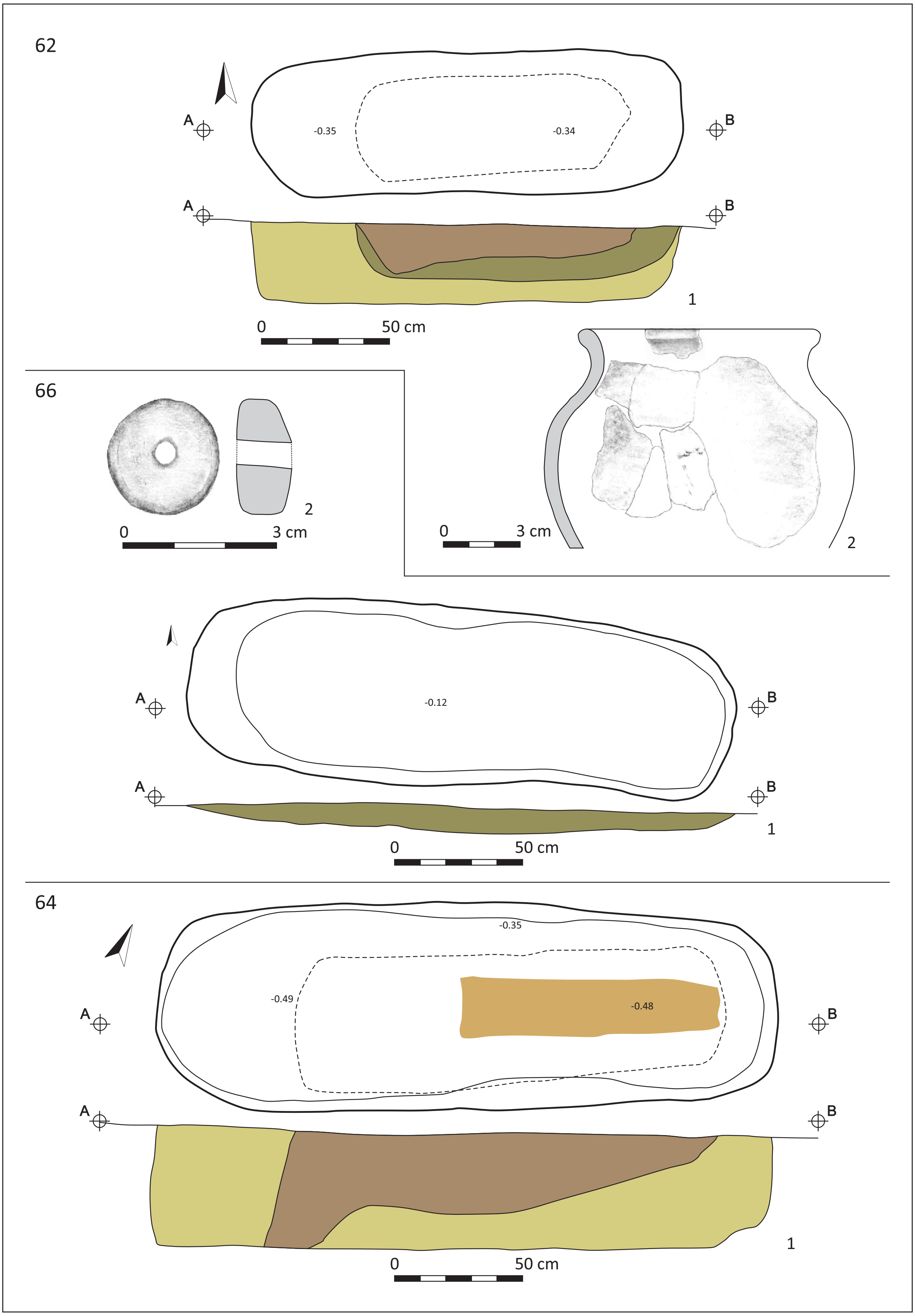

Plate 39. Graves 62, 64 and 66.

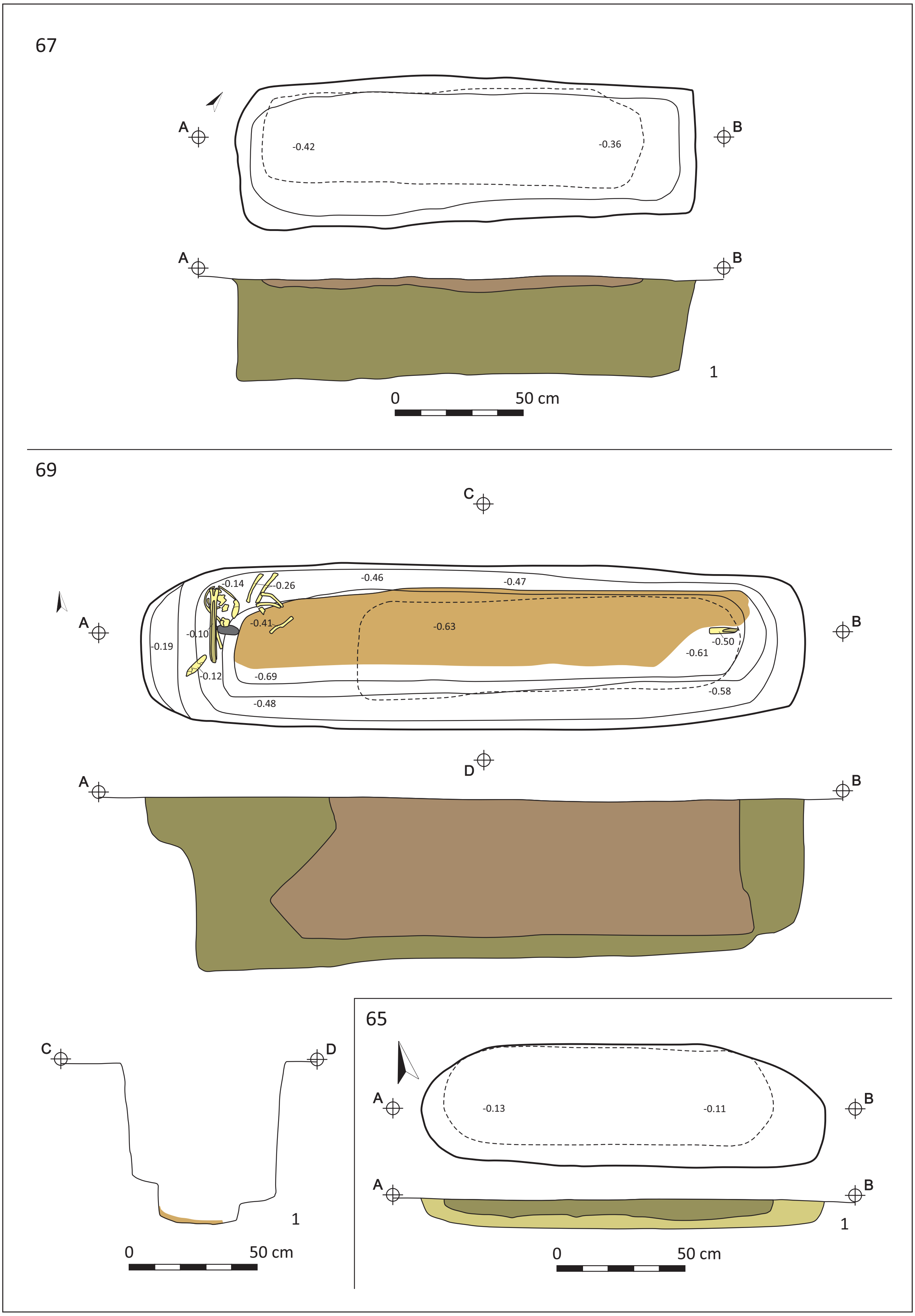

Plate 40. Graves 65, 67 and 69.

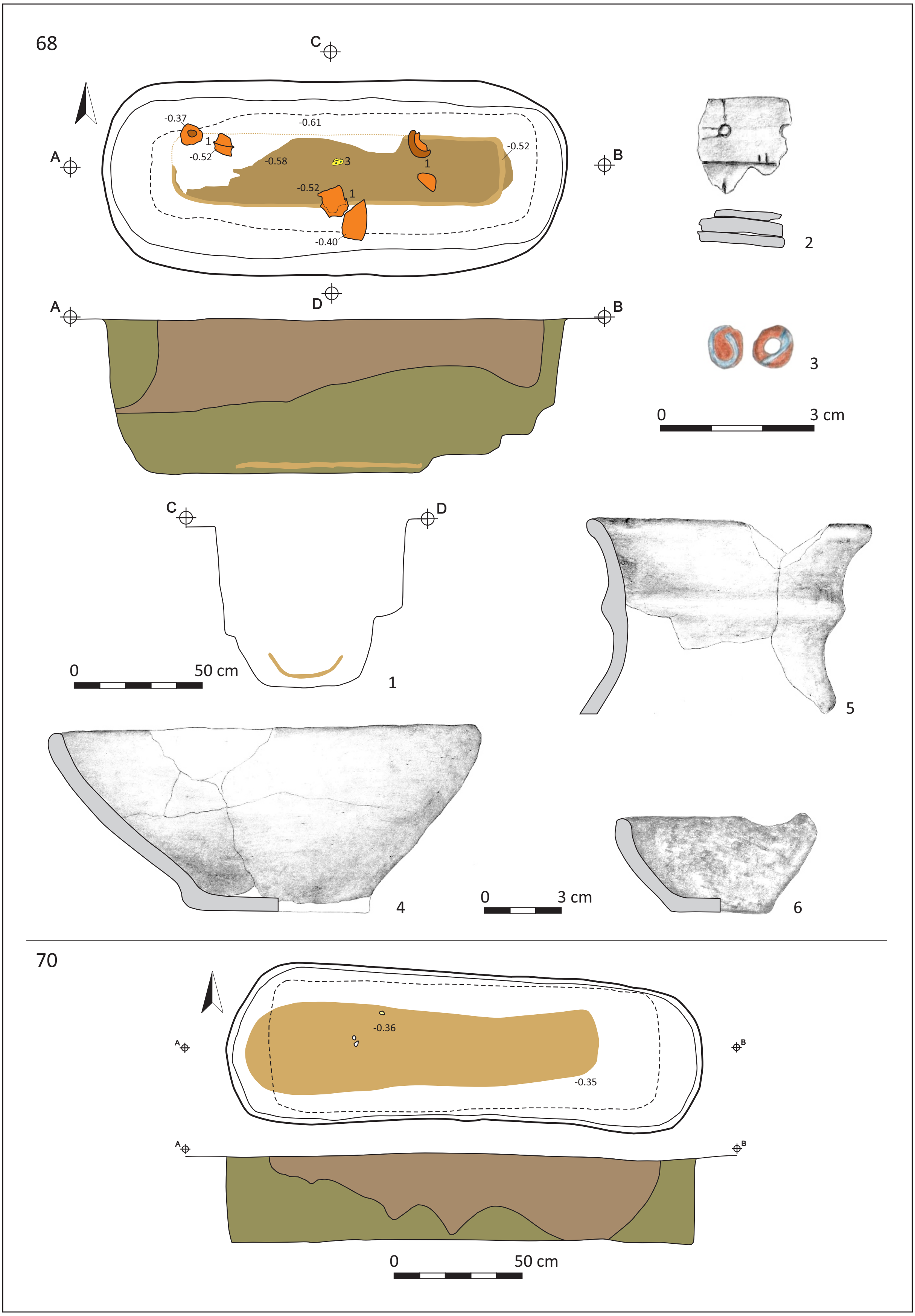

Plate 41. Graves 68 and 70.

Plate 42. 1–10. Grave 43.

Plate 43. 1–9. Grave 43; 10. grave 23; 11. grave 22; 12–13. grave 46; 14. grave 31; 15. grave 40.

Plate 44. 1. Grave 45; 2. grave 49; 3. grave 48.

Plate 45. 1. Grave 47; 2. grave 33; 3. grave 66; 4. grave 22; 5. grave 10; 6. grave 11.

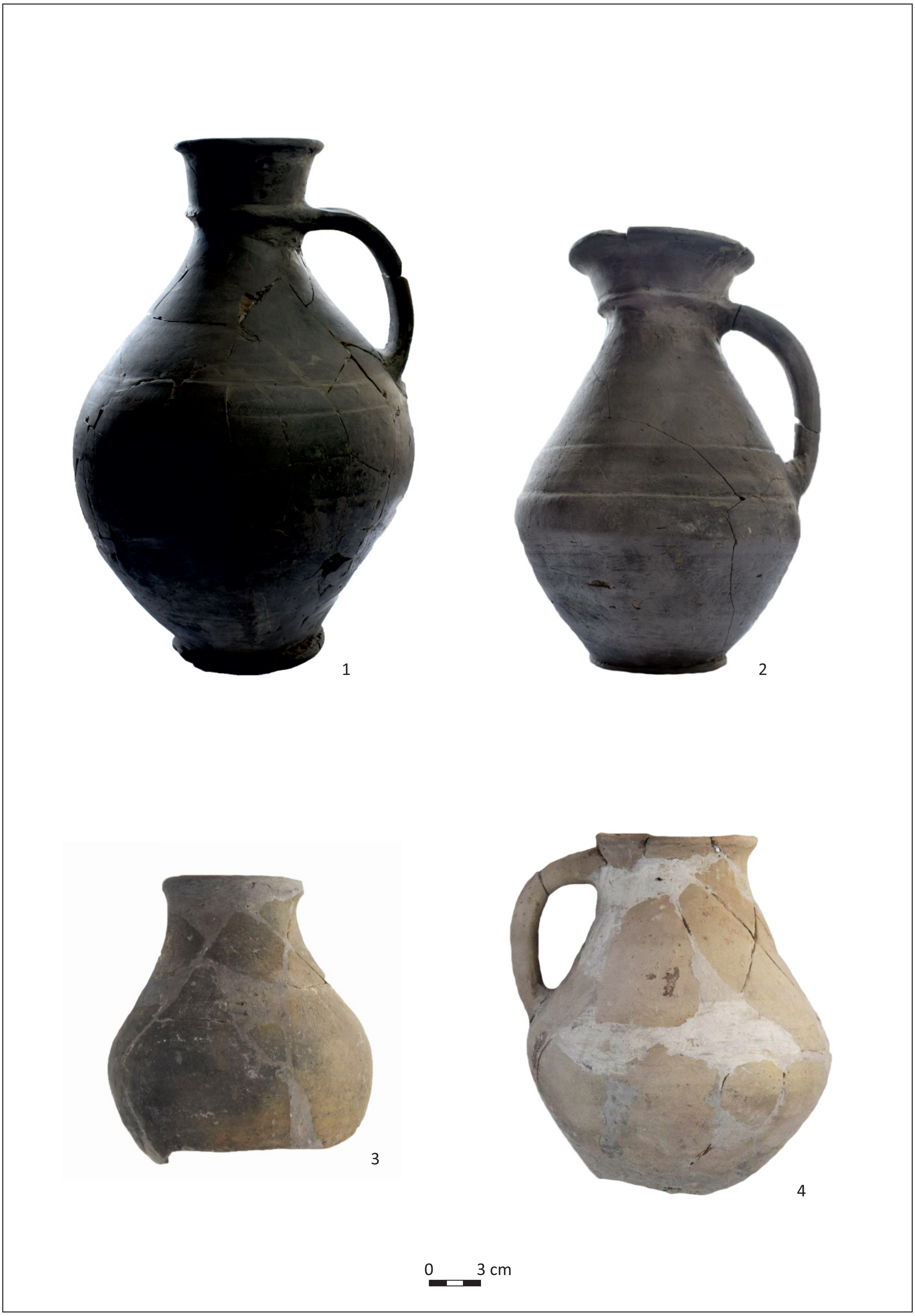

Plate 46. 1. Grave 43; 2. grave 2; 3. grave 4; 4. grave 25.

Plate 47. 1. Grave 48; 2, 7. grave 54; 3. grave 35; 4. grave 19; 5. grave 22; 6. grave 68.

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